

NEW *UBVRI* PHOTOMETRY OF 234 M33 STAR CLUSTERS

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ABSTRACT

This is the second paper of our series. In this paper, we present *UBVRI* photometry for 234 star clusters in the field of M33. For most of these star clusters, there is photometry in only two bands in previous studies. The photometry of these star clusters is performed using archival images from the Local Group Galaxies Survey, which covers 0.8 deg^2 along the major axis of M33. Detailed comparisons show that, in general, our photometry is consistent with previous measurements, especially, our photometry is in good agreement with Zloczewski & Kaluzny. Combined with the star clusters' photometry in previous studies, we present some results: none of the M33 youngest clusters ($\sim 10^7 \text{ yr}$) have masses approaching $10^5 M_{\odot}$; comparisons with models of simple stellar populations suggest a large range of ages of M33 star clusters, and some as old as the Galactic globular clusters.

Subject headings: catalogs – galaxies: individual (M33) – galaxies: spiral – galaxies: star clusters: general

1. INTRODUCTION

Star clusters are an important tool for studying the star formation histories of galaxies. They represent, in distinct and luminous “packets,” single-age and single-abundance points and encapsulate at least a partial history of the parent galaxy’s evolution.

M33 is a small Scd Local Group galaxy. It is located $\sim 809 \pm 24 \text{ kpc}$ from us (distance modulus $(m - M)_0 = 24.54 \pm 0.06$; McConnachie et al. 2004, 2005). M33 is interesting and important because it represents an intermediate morphological type between the largest “early-type” spirals and the dwarf irregulars in the Local Group. So, it can provide an important link between the star cluster populations of earlier-type spirals (Milky Way and M31) and the numerous nearby later-type dwarf galaxies.

In the pioneering work of M33 star clusters, Hiltner (1960) presented photometry for 23 M33 star cluster candidates and 23 M31 globular clusters in the *UBV* passbands using photographic plates taken with the Mt. Wilson 100-inch (2.5-m) telescope. And he found that, except for five of them, the star clusters in M33 are bluer and fainter than those in M31. At the same time, Kron & Mayall (1960) identified four M33 star clusters for which they gave *PV* photometry. Then, Melnick & D’Odorico (1978) detected 58 star cluster candidates in M33 based on a baked IIIa-J+GG385 plate covering a field of about 1° in diameter, including *B* photometry of them. The most comprehensive catalog of nonstellar objects in M33 was compiled by Christian & Schommer (1982, 1988), who detected 250 nonstellar objects by visually examining a single photographic plate taken at the Ritchey-Chretien focus of the 4-m telescope at Kitt Peak National Observatory. These authors obtained ground-based *BVI* photometry of 106

of these objects, which they believe to be star clusters. However, the star cluster candidates detected by these authors are limited to the outer part of M33.

The first survey for M33 star clusters based on CCD imaging was performed by Mochejska et al. (1998), using the data collected in the DIRECT project (Kaluzny et al. 1998; Stanek et al. 1998). These authors detected 51 globular cluster candidates in M33, 32 of which were not previously cataloged. These globular cluster candidates covered the central region of M33. In addition, Mochejska et al. (1998) presented *BVI* photometry for these globular cluster candidates.

Since the pioneering work of Chandar et al. (1999a), the era of detecting and studying M33 star clusters based on the images taken with *Hubble Space Telescope* (*HST*) has begun (Chandar et al. 1999a,b,c, 2001, 2002; Bedin et al. 2005; Park & Lee 2007; Sarajedini et al. 2007, 1998, 2000; Stonkutė et al. 2008; Park et al. 2009; Huxor et al. 2009; San Roman et al. 2009; Zloczewski & Kaluzny 2009). The *HST* resolution makes it easy to distinguish individual stars from star clusters at the distance of M33. So, M33 star clusters identified with *HST* images are much less likely to be contaminated by other extended sources, such as a background galaxy or an HII region (see Park & Lee 2007, for details).

Ma et al. (2001, 2002a,b,c,d, 2004a,b) constructed spectral energy distributions in 13 intermediate filters of the Beijing–Arizona–Taiwan–Connecticut photometric system for known M33 star clusters and star cluster candidates, and estimated star cluster properties.

In order to construct a single master catalog incorporating the entries in all of the individual catalogs including all known properties of each star cluster, Sarajedini & Mancone (2007) merged all of the above-mentioned catalogs before 2007, for a summary of the properties of all of these catalogs. This catalog contains 451 star cluster candidates, of which 255 are confirmed star clusters based on the *HST* and high-resolution ground-based imaging. The positions of the star clusters in Sarajedini & Mancone (2007) were transformed

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to the J2000.0 epoch and refined using the Local Group Galaxies Survey (LGGS; Massey et al. 2006).

Very recently, some authors used the images observed with the MegaCam camera on the 3.6-m Canada–France–Hawaii Telescope (CFHT/MegaCam) to detect star clusters in M33 (Zloczewski et al. 2008; San Roman et al. 2010). Sharina et al. (2010) presented the evolutionary parameters of 15 GCs in M33 based on the results of medium-resolution spectroscopy obtained at the Special Astrophysical Observatory 6-m telescope. Most recently, Cockcroft et al. (2011) searched for outer halo star clusters in M33 based on CFHT/MegaCam imaging as part of the Pan-Andromeda Archaeological Survey.

Ma (2012) (Paper I) presented *UBVRI* photometry of 392 objects (277 star clusters and 115 star cluster candidates) in the field of M33, using the images of the LGGS (Massey et al. 2006). And he also provided properties of M33 star clusters such as their color–magnitude diagram and color–color diagram.

In this paper, we perform aperture photometry of 234 M33 star clusters based on the M33 images of the LGGS. These sample star clusters are selected from Park & Lee (2007), San Roman et al. (2009) and Zloczewski & Kaluzny (2009). This paper is organized as follows. Section 2 describes the sample star cluster selection and *UBVRI* photometry. In Section 3, we present an analysis of the star cluster properties. Lastly, our conclusions are presented in Section 4.

2. DATA

2.1. Sample

In Paper I, we presented an updated *UBVRI* photometric catalog containing 392 star clusters and star cluster candidates in the field of M33 which were selected from the most recent star cluster catalog of Sarajedini & Mancone (2007). And we also provided properties of M33 star clusters such as their color–magnitude diagram (CMD) and color–color diagram combined with the photometry of M33 star clusters from Park & Lee (2007), San Roman et al. (2009) and Zloczewski & Kaluzny (2009). However, we found that most of M33 star clusters from San Roman et al. (2009) and Zloczewski & Kaluzny (2009) have photometry in only two bands *V* and *I*. In the color–color diagram of Paper I, there are only ~ 300 M33 star clusters, since ~ 200 star clusters have no *B* – *V* data. So, integrated magnitudes of these star clusters in *B* and *V* bands are emergently needed for studying the properties of M33 star clusters. In this paper, we will provide *UBVRI* photometry of M33 star clusters from Park & Lee (2007), San Roman et al. (2009) and Zloczewski & Kaluzny (2009). Park & Lee (2007) found 104 star clusters in the *HST*/WFPC 2 archive images of 24 fields that were not included in previous studies, of which 32 star clusters are newly detected. Zloczewski et al. (2008) presented a catalog of 4780 extended sources in a 1 deg^2 region around M33 including 3554 new star cluster candidates using the MegaCam camera on the CFHT. Zloczewski & Kaluzny (2009) used deep Advanced Camera for Surveys Wide Field Channel (ACS/WFC) images of M33 to check the nature of extended objects detected by Zloczewski et al. (2008),

and found that 24 star cluster candidates were confirmed to genuine compact star clusters. In addition, Zloczewski & Kaluzny (2009) detected 91 new star clusters based on these deep ASC/WFC images of M33, and provided integrated magnitudes and angular sizes for all these 115 star clusters. San Roman et al. (2009) presented integrated photometry and color–magnitude diagrams for 161 star clusters in M33 based on the ACS/WFC images, of which 115 were previously uncataloged. By cross-checking with the updated photometric catalog of M33 star cluster and candidate in Paper I, we found that, the photometry of 36 star clusters of Park & Lee (2007) was not presented in Paper I, of which the 32 star clusters were newly detected by Park & Lee (2007) and the remaining four were detected by previous studies. The three of the four star clusters were included in Sarajedini & Mancone (2007) and were classified as ‘Stellar’ (objects 69, 293 and 279 of Sarajedini & Mancone 2007 which being called star clusters 36, 195 and 197 in Park & Lee 2007, respectively), and the remaining one is star cluster 75 in Park & Lee (2007). The photometry of 118 star clusters of San Roman et al. (2009) was not presented in Paper I, of which 115 star clusters were newly detected by San Roman et al. (2009) based on the ACS/WFC images, and the remaining three star clusters were included in Sarajedini & Mancone (2007) which were classified as ‘Galaxy’ or ‘Stellar’ (objects 57, 62 and 69 of Sarajedini & Mancone 2007 which being called star clusters 27, 34 and 38 in San Roman et al. 2009). The photometry of all star clusters of Zloczewski & Kaluzny (2009) was not presented in Paper I, of which one star cluster was included in Sarajedini & Mancone (2007) and was classified as ‘Galaxy’ (object 57 of Sarajedini & Mancone 2007 which being called 33-3-021 in Zloczewski & Kaluzny 2009). So, in this paper, we will perform photometry for the M33 star clusters in Park & Lee (2007), Zloczewski & Kaluzny (2009) and San Roman et al. (2009) that were not presented in Paper I. Altogether, there are 269 star clusters combining the star clusters from Park & Lee (2007), Zloczewski & Kaluzny (2009) and San Roman et al. (2009). However, by cross-checking the coordinates of the star clusters of Park & Lee (2007), Zloczewski & Kaluzny (2009) and San Roman et al. (2009), and by checking the images of star clusters from the LGGS images, we found that, star clusters 7, 10, 14, and 18 of Park & Lee (2007) are the same objects with star clusters 33, 51, 59, and 64 of San Roman et al. (2009), respectively. In addition, there are 18 common star clusters between Zloczewski & Kaluzny (2009) and San Roman et al. (2009) (see Table 3 of San Roman et al. 2009). When we do photometry of the sample star clusters in this paper, we found that, there is nothing in the position of star cluster 195 of Park & Lee (2007) (i.e., no. 17 of Bedin et al. 2005), which was named object 293 in Sarajedini & Mancone (2007) and was classified as ‘Stellar’ by Sarajedini & Mancone (2007). We also found that, in the LGGS images of M33, (1) there are some bright objects near star cluster 12 of Park & Lee (2007); (2) there is a bright object near star clusters 23 and 32 of Park & Lee (2007), respectively; (3) there is a bright object very near star clusters 15, 114 and 141 of San Roman et al. (2009), respectively; (4) there are three bright objects near star cluster 143 of

San Roman et al. (2009); (5) there is a very close object to star clusters ZK-21, ZK-22, ZK-28, ZK-66 and ZK-72 of Zloczewski & Kaluzny (2009), respectively. The photometry of these 13 star clusters cannot be determined accurately in this paper. So, this paper will present homogeneous *UBVRI* photometries for 234 star clusters in M33 using the images of the LGGS (see details about the LGGS in Paper I).

2.2. Photometry

We used the LGGS archival images of M33 in the *UBVRI* bands to do photometry (see details in Paper I). We performed aperture photometry of the 234 M33 star clusters found in the LGGS images in all of the *UBVRI* bands to provide a comprehensive and homogeneous photometric catalog for them. The photometry routine we used is IRAF/DAOPHOT (Stetson 1987). The photometric process used in this paper is the same as in Paper I. We have checked the aperture of every sample star cluster considered here by visual examination to make sure that it was not too large (to avoid contamination from other sources). The aperture photometry of star clusters was transformed to the standard system using transformation (constant offsets neglecting color term) derived based on aperture photometry of stars whose *UBVRI* magnitudes were published by Massey et al. (2006), who calibrated their photometry with standard stars of Landolt (1992). Finally, except for star cluster 27 of San Roman et al. (2009) (i.e., SR27, which was named 33-3-021 in Zloczewski & Kaluzny 2009) and ZK-82 of Zloczewski & Kaluzny (2009) in the *I* band, and ZK-90 of Zloczewski & Kaluzny (2009) in the *U* and *I* bands, we obtained photometry for 234 star clusters in the individual *UBVRI* bands. SR27 falls in the gap of the LGGS image in the *I* band, and ZK-82 and ZK-90 in the *I* band fall in the bleeding CCD column of a saturated star, and ZK-90 in the *U* band does not lie in the LGGS image. Table 1 lists our new *UBVRI* magnitudes and the aperture radii used (we adopted $0.258''\text{pixel}^{-1}$ from the image header), with errors given by IRAF/DAOPHOT. The star cluster names follow the naming convention of Sarajedini & Mancone (2007) (i.e., SM $\times \times \times$), Park & Lee (2007) (i.e., PL $\times \times \times$), San Roman et al. (2009) (i.e., SR $\times \times \times$), and Zloczewski & Kaluzny (2009). In addition, we also list the reddening values of the sample star clusters in Table 1 (see Section 3.1 for details). In Table 1, R_C and I_C mean that *RI* magnitudes are on Johnson–Kron–Cousins system.

To examine the quality and reliability of our photometry, we compared the aperture magnitudes of the 234 star clusters obtained here with previous photometry of Park & Lee (2007), San Roman et al. (2009), and Zloczewski & Kaluzny (2009). There are eight star clusters, of which the magnitude scatters in the *V* band between this study and previous studies of Park & Lee (2007) and San Roman et al. (2009) are larger than 1.0 mag, i.e., our magnitudes are fainter than those obtained by Park & Lee (2007) and San Roman et al. (2009). We listed the comparison between this study and previous studies of *V* photometry for these eight star clusters in Table 2. We also plotted their images in Figure 2, in which the circles are photometric apertures adopted here. From this figure, we can see that nearly all these star clusters are close to one or more bright sources. If

photometric apertures are larger than the values adopted here, the light from these bright sources will not be excluded. As we know that, in Park & Lee (2007), the *BVI* integrated aperture photometry of M33 star clusters, which is included in $50' \times 80'$ field of M33 based on CCD images taken with the CFH12k mosaic camera at the CFHT, is derived with an aperture of $r = 4.0''$ for *V* magnitude measurement and an aperture of $r = 2.0''$ for the measurement of color. San Roman et al. (2009) derived integrated photometry and color-magnitude diagrams (CMDs) for 161 star clusters in M33 using the ACS/WFC images. These authors adopted an aperture radius of $r = 2.2''$ for *V* magnitude measurements and $r = 1.5''$ for the colors. For these eight star clusters, a large scatter in the *V* photometric measurement between this study and previous studies (Park & Lee 2007; San Roman et al. 2009) mainly results from different photometric aperture sizes adopted by different authors (see Paper I for details). Figures 3–5 show the comparison of our photometry of the star clusters with previous photometry of Park & Lee (2007), San Roman et al. (2009) and Zloczewski & Kaluzny (2009). PL197 is not included in the figure of ΔV comparison of Figure 3 because of too large value of ΔV to be drawn in the figure. In addition, in Figure 5 (and Figures 6, 8 and 9 below), we have transformed the ACS/WFC magnitudes in F475W, F606W and F814W bands to the Johnson–Cousins *B*, *V* and *I* magnitudes using the color-dependent synthetic transformations given by Sirianni et al. (2005).

From Figures 3–5, we can see that our measurements in the *V* band get systematically fainter than the photometric measurements in San Roman et al. (2009) for fainter sources ($V \geq 19$ mag). The $(V - I)$ colors obtained here are in good agreement with those in Park & Lee (2007) and San Roman et al. (2009), however, the difference of $(B - V)$ colors between San Roman et al. (2009) and this paper is large, which turned out to be 0.388 ± 0.040 with $\sigma = 0.268$. From Figure 5, we can see that both the $(B - V)$ and $(V - I)$ colors obtained here are in good agreement with those in Zloczewski & Kaluzny (2009), however, the *V* difference between this study and Zloczewski & Kaluzny (2009) turned out to be -0.103 ± 0.026 with $\sigma = 0.262$. By cross-identification, San Roman et al. (2009) provided 21 common star clusters in Zloczewski & Kaluzny (2009). We derived photometry for 18 of these 21 star clusters. We compared the photometry of these 18 star clusters with previous measurements in San Roman et al. (2009) and Zloczewski & Kaluzny (2009) for comparison. Figure 6 shows the comparison. From Figure 6, we can see that our measurements in *V* band get systematically fainter than the photometric measurements in San Roman et al. (2009) for fainter sources ($V \geq 19$ mag), however, this trend disappears between this study and Zloczewski & Kaluzny (2009). Both the $(B - V)$ and $(V - I)$ colors obtained here are in good agreement with those in San Roman et al. (2009) and Zloczewski & Kaluzny (2009). In Paper I, we have discussed the *V* difference between his study and previous studies in detail, and showed that the *V* difference resulted from different photometric apertures adopted in his study and previous studies. In Paper I, we showed that if the photometric apertures were adopted in our

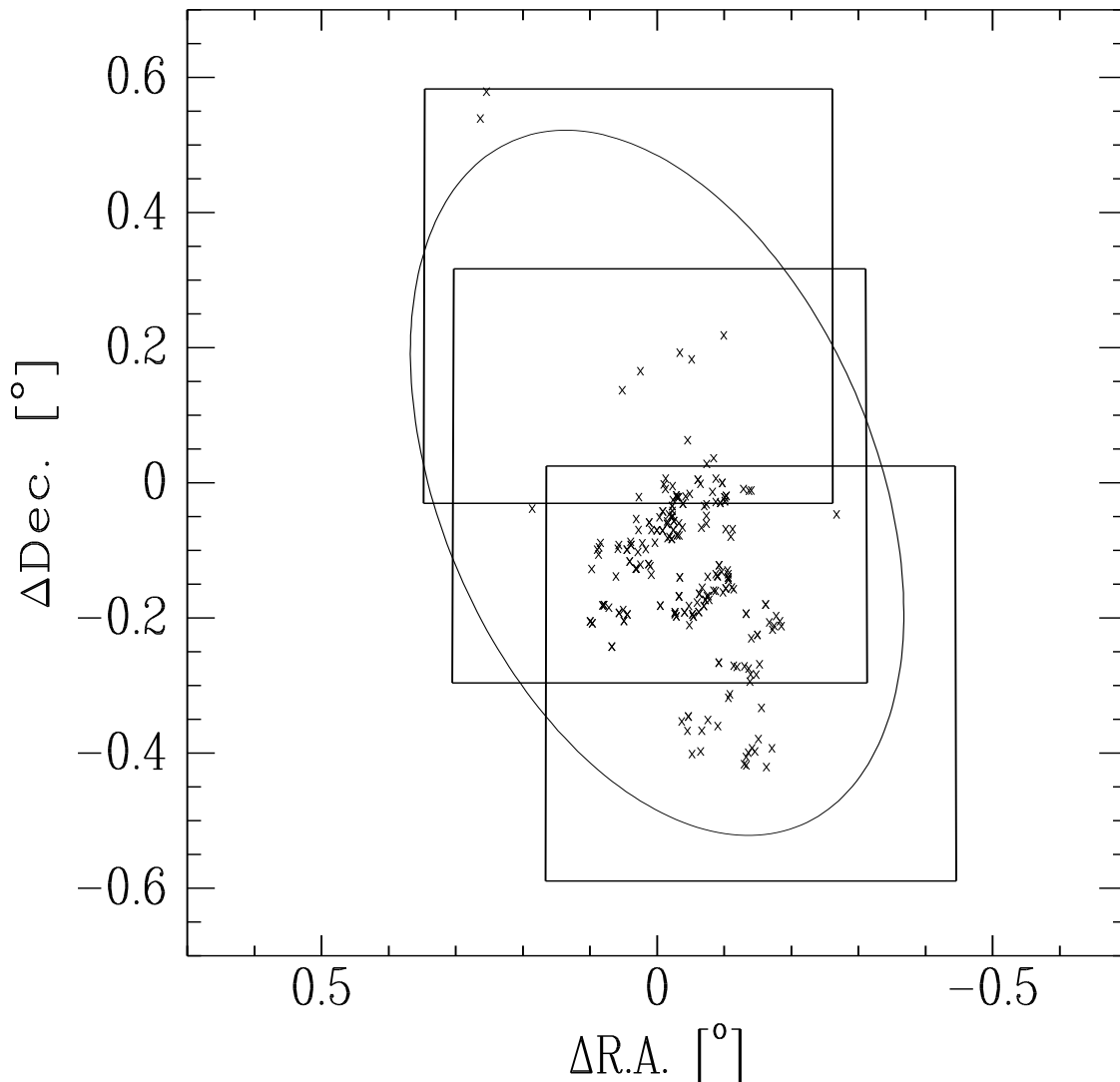


FIG. 1.— Spatial distribution of the 234 star clusters of M33 which were selected from Park & Lee (2007), San Roman et al. (2009), and Zloczewski & Kaluzny (2009) and their loci in the LGGS fields. We determined the photometry for these star clusters based on the LGGS archival images of M33 in the $UBVRI$ bands. The large ellipse is the D_{25} boundary of the M33 disk (de Vaucouleurs et al. 1991). The three large squares are the LGGS fields.

study to be the same as previous studies, the V difference disappeared.

3. RESULTS

In Paper I, we have presented some results for M33 star clusters including the CMD and color-color diagram. In addition, in Paper I, we pointed out that, before Zloczewski & Kaluzny (2009), none of M33 star clusters with $V > 21.0$ mag has been detected. And Zloczewski & Kaluzny (2009) emphasized that the faintest known globular cluster in the Milky Way has $M_V \sim -1$ mag comparing with $M_V \sim -4$ mag ($V \sim 21$ mag) observed for the faintest of the known M33 globular cluster candidates before Zloczewski & Kaluzny (2009). Zloczewski & Kaluzny (2009) provided integrated magnitudes for 115 M33 star clusters using the ACS/WFC images, of which nine have $21.0 \text{ mag} < V < 22.0 \text{ mag}$ corresponding to

$-4 \text{ mag} < M_V < -3 \text{ mag}$. Although the faintest star cluster of M33 detected by Zloczewski & Kaluzny (2009) is 2.0 mag brighter than the faintest Galactic globular cluster, it will provide something unique to the analysis of M33 star clusters when including them. In fact, Paper I included the photometry of the M33 star clusters in Zloczewski & Kaluzny (2009) when we provided the results for M33 star clusters, however, most star clusters in Zloczewski & Kaluzny (2009) have photometry in only two bands (V and I). There are only 19 sample star clusters of Zloczewski & Kaluzny (2009) in the color-color diagram provided in Paper I. In addition, most star clusters in San Roman et al. (2009) also have photometry in only two bands (V and I). So, it is necessary that we re-provide a CMD and color-color diagram of M33 including photometry obtained in this paper.

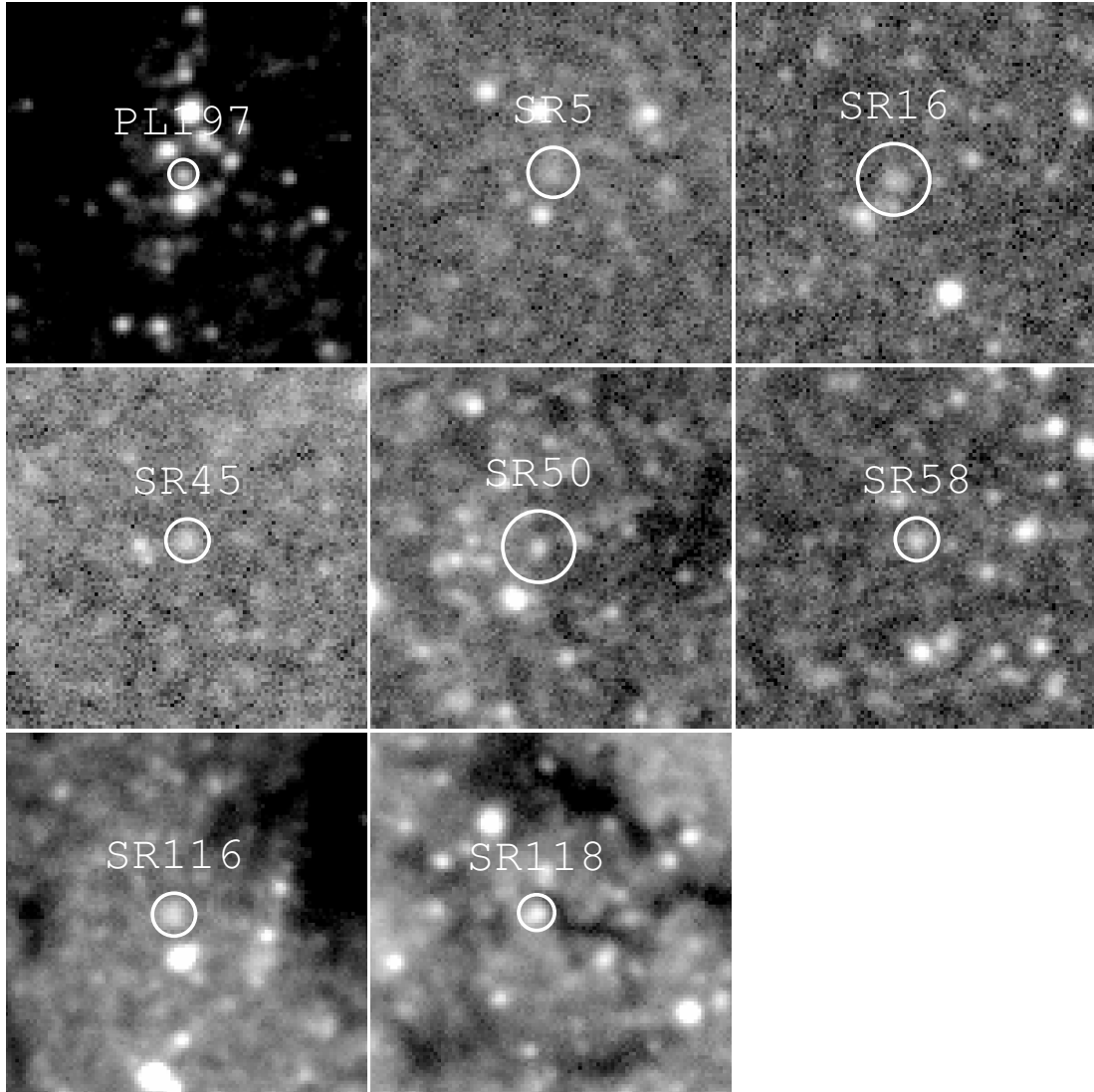


FIG. 2.— Finding charts of eight star clusters in the LGG V band, of which the magnitude scatters in the V band between this and those studies of Park & Lee (2007) and San Roman et al. (2009) are larger than 1.0 mag, i.e., our measurements are fainter than those in Park & Lee (2007) and San Roman et al. (2009). The circles are photometric apertures adopted in this paper.

3.1. Color–Magnitude Diagram

The CMD can provide a qualitative model-independent global indication of cluster-formation history that can be compared between galaxies because $(B - V)_0$ and $(V - I)_0$ are reasonably good age indicators, at least between young and old populations, with a secondary dependence on metallicity (Chandar et al. 1999b). CMDs of M33 star clusters have been previously discussed in the literature (Christian & Schommer 1982, 1988; Chandar et al. 1999b; Park & Lee 2007; Paper I). However, with a much larger star cluster sample in this paper, it is worth investigating them again. This

paper includes 523 star clusters of M33, of which the photometry of 234 and 277 is derived in this paper and in Paper I, respectively; and the photometry of the remaining 12 star clusters is from Park & Lee (2007), San Roman et al. (2009) and Zloczewski & Kaluzny (2009), since we cannot accurately derive the photometry for these 12 star clusters (see Section 2.2 for details). The 277 star clusters from Paper I are confirmed by Sarajedini & Mancone (2007) (254 star clusters), Park & Lee (2007) (7 star clusters), and San Roman et al. (2009) (16 star clusters) based on the *HST* and high-resolution ground-based imaging.

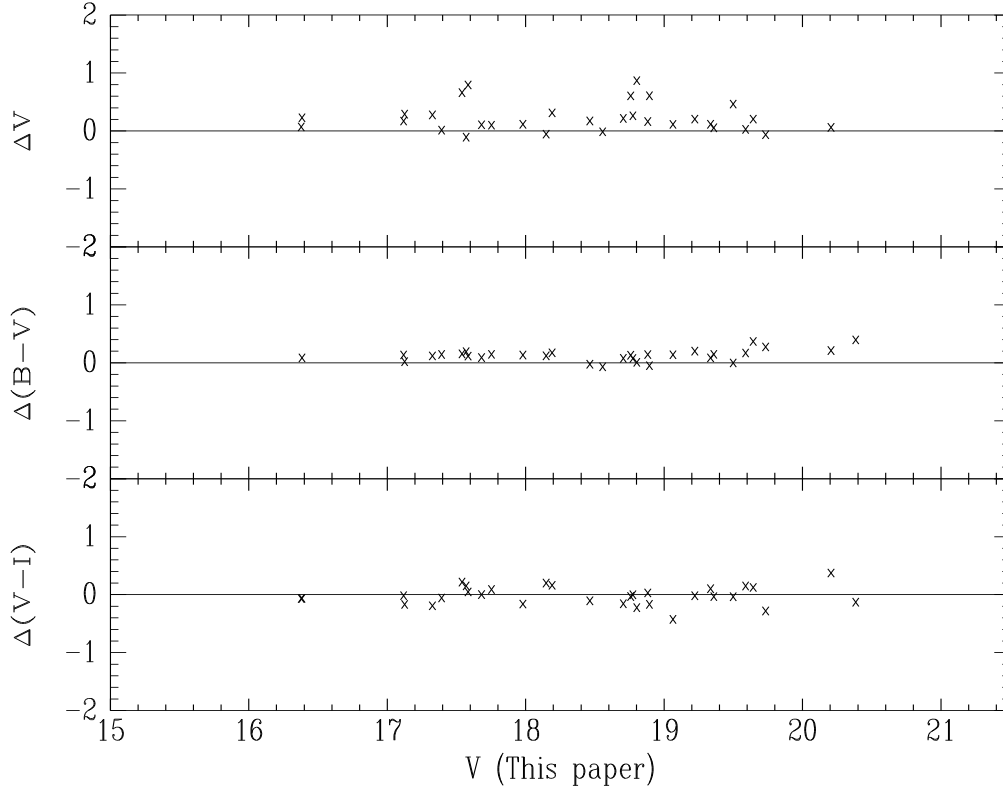


FIG. 3.— Comparisons of our photometry of M33 star clusters in the $UBVRI$ bands with previous photometry in Park & Lee (2007). The photometric offsets and rms scatter of the differences between their measurements and our new magnitudes are: $\Delta V = 0.306 \pm 0.089$ with $\sigma = 0.498$, $\Delta(B - V) = 0.126 \pm 0.019$ with $\sigma = 0.102$, and $\Delta(V - I) = -0.023 \pm 0.030$ with $\sigma = 0.162$ (this study minus Park & Lee 2007).

We point out that the photometry of M33 star clusters obtained in Paper I and this study is homogeneous photometric data in the same photometric system. For completeness of data and readers' references, we list the photometry of 277 star clusters of Paper I in Table 3 including the reddening values from Park & Lee (2007) and San Roman et al. (2009) in column 9 of Table 3 (Table 3 includes $E(B - V)$ missed in Paper I.). In Table 3, R_C and I_C mean that RI magnitudes are on Johnson-Kron-Cousins system. For the reddening values of the star clusters, we used those from Park & Lee (2007) or San Roman et al. (2009). For the star clusters, Park & Lee (2007) and San Roman et al. (2009) both presented their reddening values, we adopted their mean values. For the star clusters, Park & Lee (2007) and San Roman et al. (2009) did not present their reddening values, we adopted a uniform value of $E(B - V) = 0.1$ typical of the published values for the line-of-sight reddenings to M33 that Sarajedini & Mancone (2007) adopted. Figure 7 shows the spatial distribution of these 523 star clusters. The large ellipse is the D_{25} boundary of the M33 disk (de Vaucouleurs et al. 1991). Figure 8 displays the integrated $M_V - (B - V)_0$ and $M_V - (V - I)_0$ CMDs of the sample star clusters of M33. The absolute magnitudes of the star clusters were derived for the adopted distance modulus of $(m - M)_0 = 24.64$ obtained by Galleti et al. (2004). The interstellar extinction curve, A_λ , is taken from Schlegel et al. (1998). Below each CMD in Figure 8 we plotted the star cluster distribution in color space. To the right of each CMD

in Figure 8 we showed a histogram of the star clusters' absolute V magnitudes.

Sarajedini & Mancone (2007), Park & Lee (2007), and Paper I showed that the M33 star clusters are roughly separated into blue and red groups with a color boundary of $(B - V)_0 \simeq 0.5$ in the $M_V - (B - V)_0$ based on a small star cluster sample. However, this feature did not clearly appear in Figure 8 as previous studies (Sarajedini & Mancone 2007; Park & Lee 2007; Paper I). Figure 8 shows that the star cluster luminosity function peaks near $M_V \sim -6.0$ mag, and nearly half of star clusters lies between $M_V = -5.5$ and $M_V = -7.0$ mag.

By adding models to the CMDs, we can obtain a more detailed history of star cluster formation. Three fading lines (M_V as a function of age) of Bruzual & Charlot (2003) for a metallicity of $Z = 0.004$, $Y = 0.24$ which are thought to be appropriate for M33 star clusters (Chandar et al. 1999b), assuming a Salpeter initial mass function (IMF; Salpeter 1955) with lower and upper-mass cut-offs of $m_L = 0.1 M_\odot$ and $m_U = 100 M_\odot$, and using the Padova-1994 evolutionary tracks, are plotted on the CMDs of M33 star clusters for three different total initial masses: 10^5 , 10^4 , and $10^3 M_\odot$. The majority of M33 star clusters fall between these three fading lines. From Figure 8, we note that none of the youngest clusters ($\sim 10^7$ yr) have masses approaching $10^5 M_\odot$, which is consistent with the results of Chandar et al. (1999b) and Paper I. For ages older than 10^9 yr, some clusters with substantially higher masses are seen.

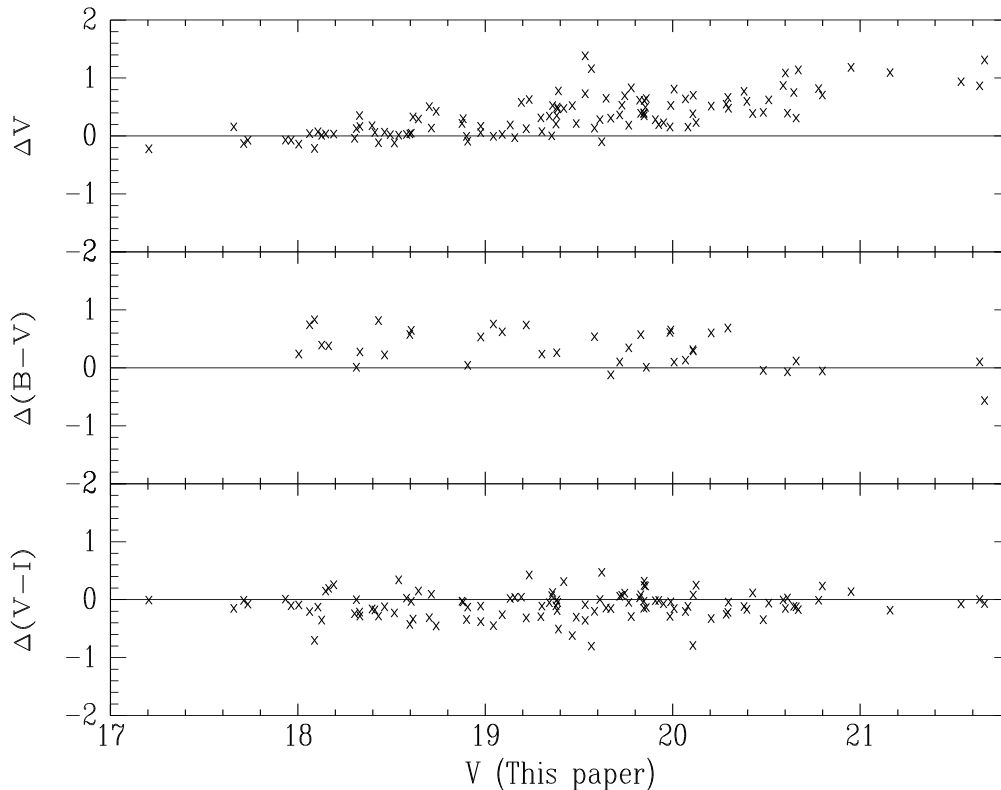


FIG. 4.— Comparisons of our photometry of M33 star clusters in the $UBVRI$ bands with previous photometry in San Roman et al. (2009). The photometric offsets and rms scatter of the differences between their measurements and our new magnitudes are: $\Delta V = 0.363 \pm 0.033$ with $\sigma = 0.352$, $\Delta(B - V) = 0.332 \pm 0.052$ with $\sigma = 0.316$, and $\Delta(V - I) = -0.100 \pm 0.021$ with $\sigma = 0.244$ (this study minus San Roman et al. 2009).

3.2. Color-Color Diagram

Figure 9 shows the integrated $(B - V)_0$ versus $(V - I)_0$ color-color diagram for M33 star clusters. Galactic globular clusters from the online database of Harris (1996; 2010 update) are also plotted for comparison. We overplotted the theoretical evolutionary path for the single stellar population (SSP; Bruzual & Charlot 2003) for $Z = 0.004, Y = 0.24$ that was appropriate for M33 (Chandar et al. 1999b). To identify different time periods, the different symbols correspond to $10^6, 10^7, 10^8, 10^9$, and 10^{10} yr. For comparison, the evolutionary path of the SSP for $Z = 0.02, Y = 0.28$ is also overlaid.

In general, the star clusters in M33 are located along the sequence that is consistent with the theoretical evolutionary path for $Z = 0.004, Y = 0.24$, while some are on the redder or bluer side in the $(V - I)_0$ color. The wide color range of M33 star clusters implies a large range of ages, suggesting a prolonged epoch of formation. From Figure 9, we find that the photometry is shifted below the SSP lines, i.e., the sample star clusters are on the redder side in the $(B - V)_0$ color, when the star clusters have the $(V - I)_0$ color between -0.5 and 0.4 . In the same time, from Figure 9, we also find that the photometry for most of the Galactic globular clusters is also below the SSP lines but with much smaller range. Large scatter observed for M33 star clusters possibly results from large errors of colors. By comparing with SSP models, we can see that there are a large range of ages of M33 star clusters, of which some star clusters are as old as the

Galactic globular clusters.

4. SUMMARIES AND CONCLUSIONS

In this paper, we present $UBVRI$ photometric measurements for 234 star clusters in the field of M33. These sample star clusters of M33 are from Park & Lee (2007), San Roman et al. (2009) and Zloczewski & Kaluzny (2009). For most of these star clusters, there is photometry in only two bands (V and I) in previous studies. Photometry of these star clusters is performed using archival images from the LGGS (Massey et al. 2006). Detailed comparisons show that, in general, our photometry is consistent with previous measurements, especially, our photometry is in good agreement with that of Zloczewski & Kaluzny (2009). Combined with the star clusters' photometry in previous studies, we present some results:

1. None of the M33 youngest clusters ($\sim 10^7$ yr) have masses approaching $10^5 M_\odot$.
2. The wide color range of M33 star clusters implies a large range of ages, suggesting a prolonged epoch of formation. And comparisons with SSP models suggest a large range of ages of M33 star clusters, and some as old as the Galactic globular clusters.

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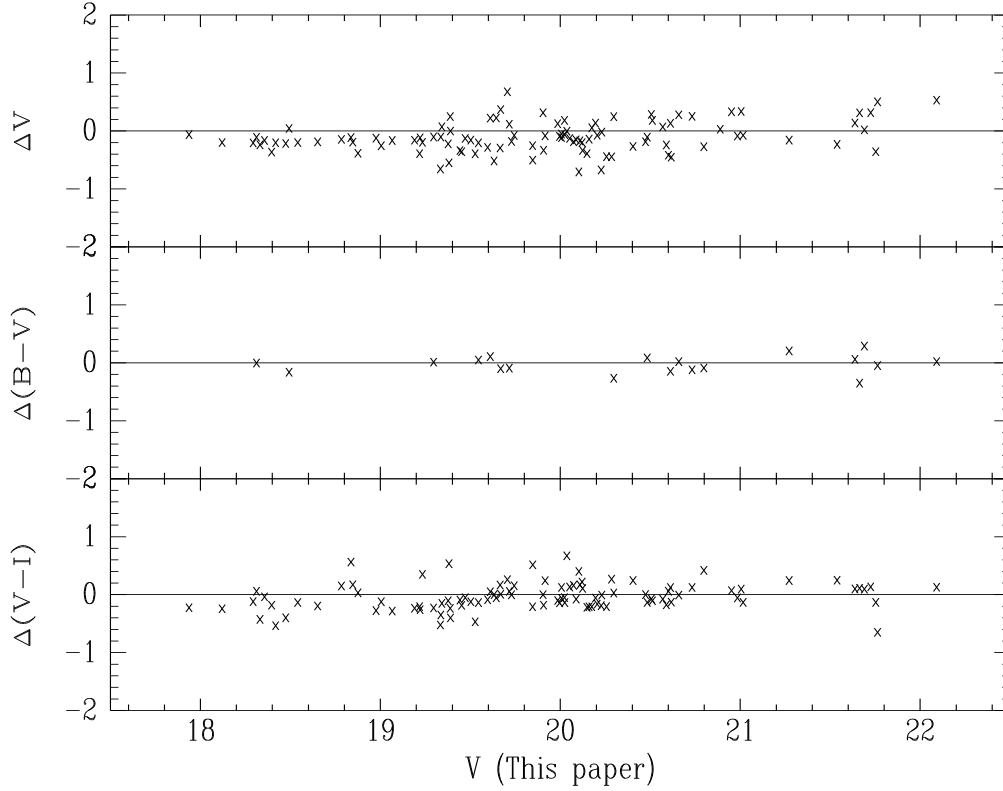


FIG. 5.— Comparisons of our photometry of M33 star clusters in the *UBVRI* bands with previous photometry in Zloczewski & Kaluzny (2009). The photometric offsets and rms scatter of the differences between their measurements and our new magnitudes are: $\Delta V = -0.103 \pm 0.026$ with $\sigma = 0.262$, $\Delta(B - V) = -0.028 \pm 0.035$ with $\sigma = 0.149$, and $\Delta(V - I) = -0.032 \pm 0.023$ with $\sigma = 0.234$ (this study minus Zloczewski & Kaluzny 2009).

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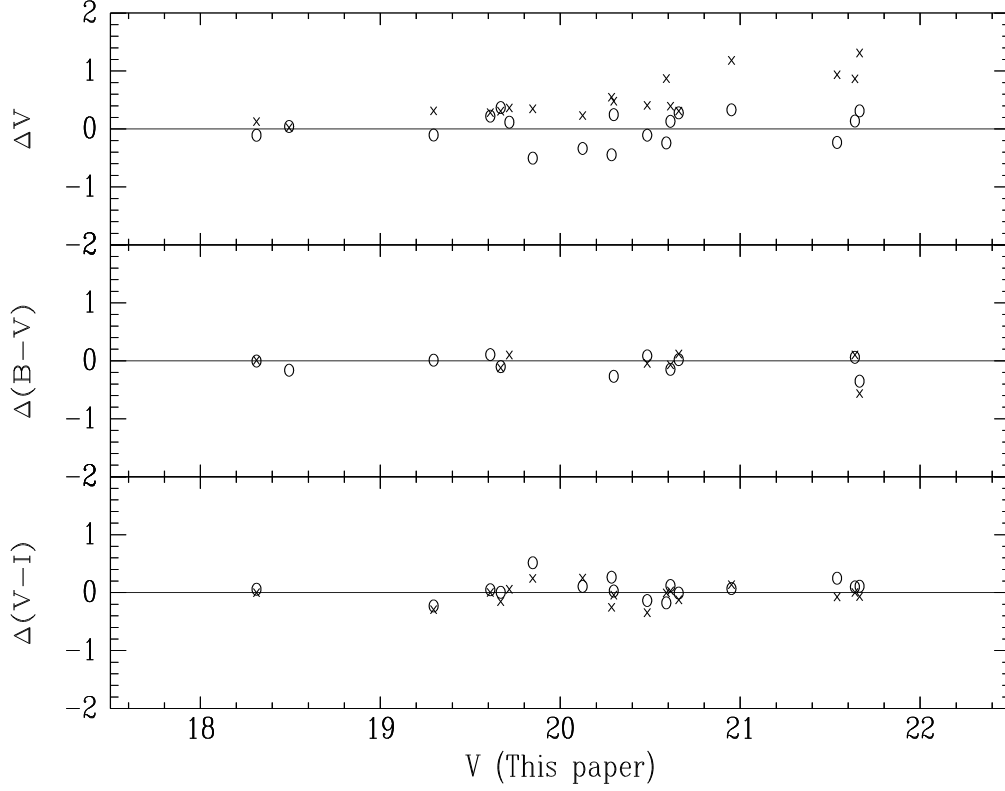


FIG. 6.— Comparisons of our photometry of M33 star clusters in the $UBVRI$ bands with previous measurements in San Roman et al. (2009) and Zloczewski & Kaluzny (2009). Crosses and circles represent the photometry difference between this study and previous study of San Roman et al. (2009), and the photometry difference between this study and previous study of Zloczewski & Kaluzny (2009), respectively. The photometric offsets and rms scatter of the differences between their measurements and our new magnitudes are: $\Delta V = 0.517 \pm 0.086$ with $\sigma = 0.353$, $\Delta(B - V) = -0.050 \pm 0.079$ with $\sigma = 0.208$, and $\Delta(V - I) = -0.037 \pm 0.040$ with $\sigma = 0.161$ (this study minus San Roman et al. 2009); $\Delta V = 0.006 \pm 0.065$ with $\sigma = 0.268$, $\Delta(B - V) = -0.068 \pm 0.045$ with $\sigma = 0.143$, and $\Delta(V - I) = 0.071 \pm 0.045$ with $\sigma = 0.173$ (this study minus Zloczewski & Kaluzny 2009).

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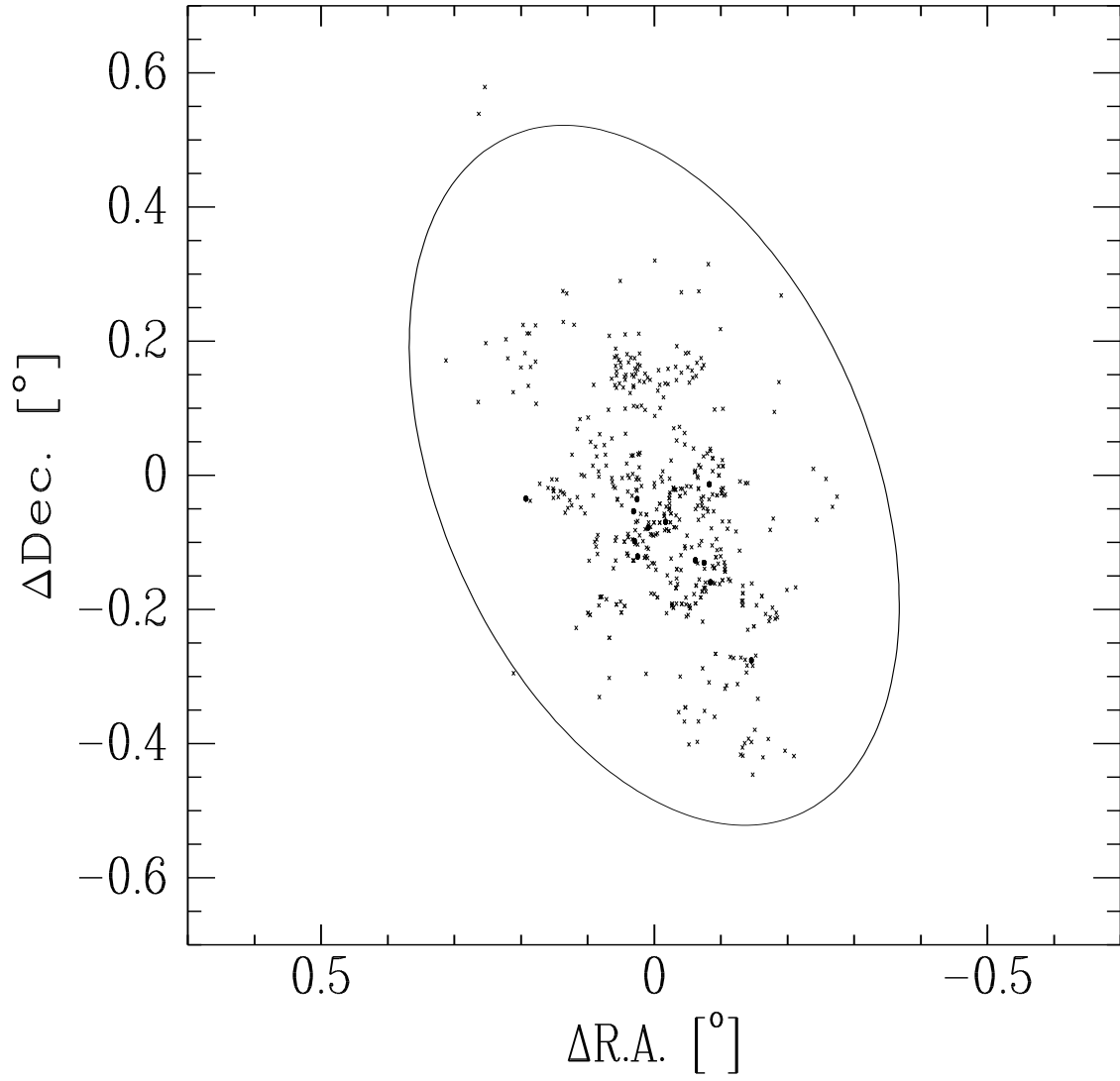


FIG. 7.— Spatial distribution of the 523 star clusters in M33. Crosses denote the star clusters, of which the photometry is obtained in Paper I and this study, and filled circles denote the star clusters, of which the photometry was obtained by Park & Lee (2007), San Roman et al. (2009), and Zloczewski & Kaluzny (2009). The large ellipse is the D_{25} boundary of the M33 disk (de Vaucouleurs et al. 1991).

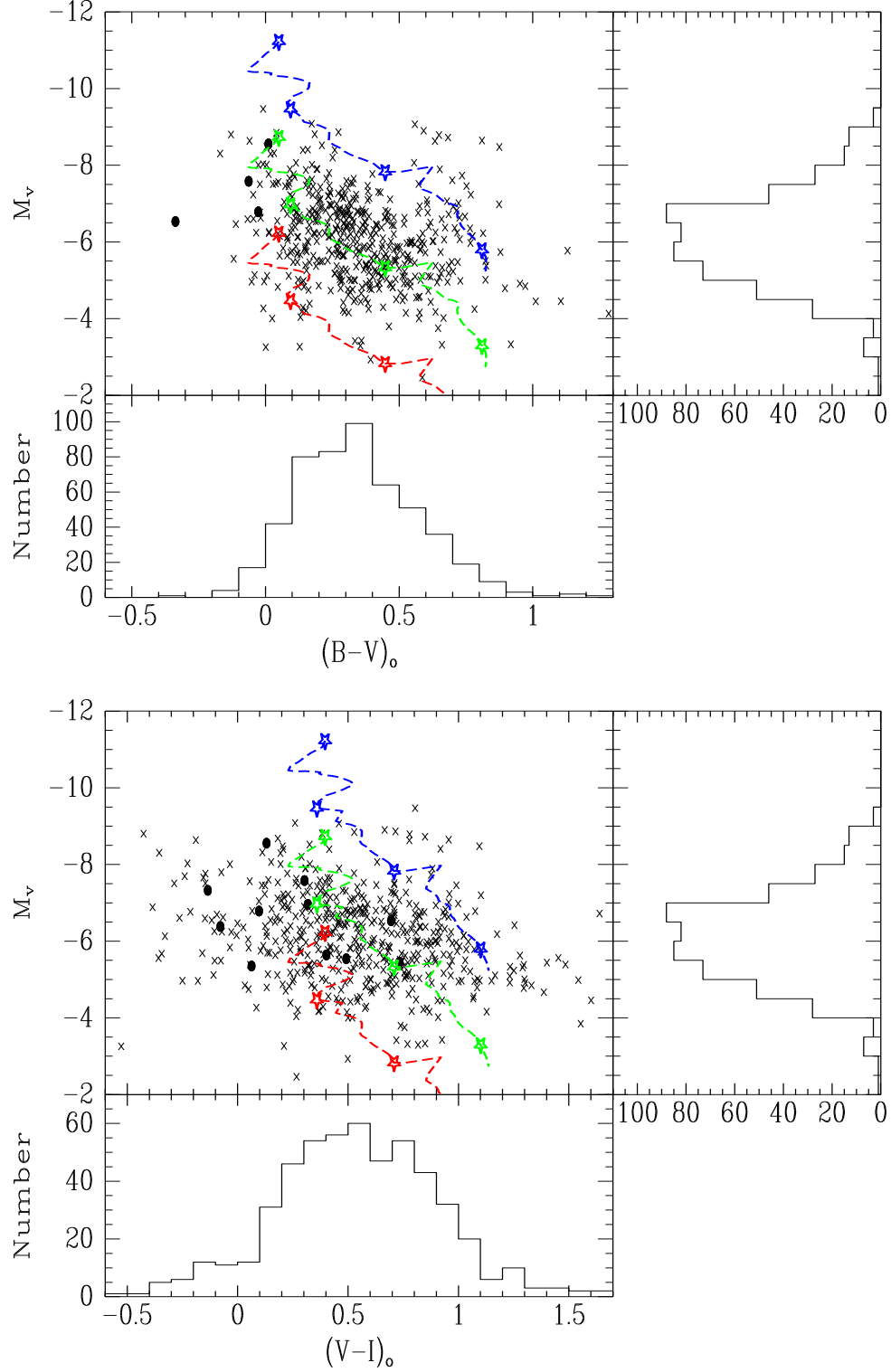


FIG. 8.— Color-magnitude diagrams of M33 clusters. Crosses represent the star clusters in Ma (2012) and this study, filled circles represent the star clusters in Park & Lee (2007), San Roman et al. (2009), and Zloczewski & Kaluzny (2009). Fading lines are indicated for star clusters with total initial masses of 10^5 (upper dashed line), 10^4 , and 10^3 (lower dashed line) M_\odot , assuming a Salpeter IMF (see text). Stars along each fading line represent ages of 10^7 , 10^8 , 10^9 , and 10^{10} yr, from top to bottom, respectively.

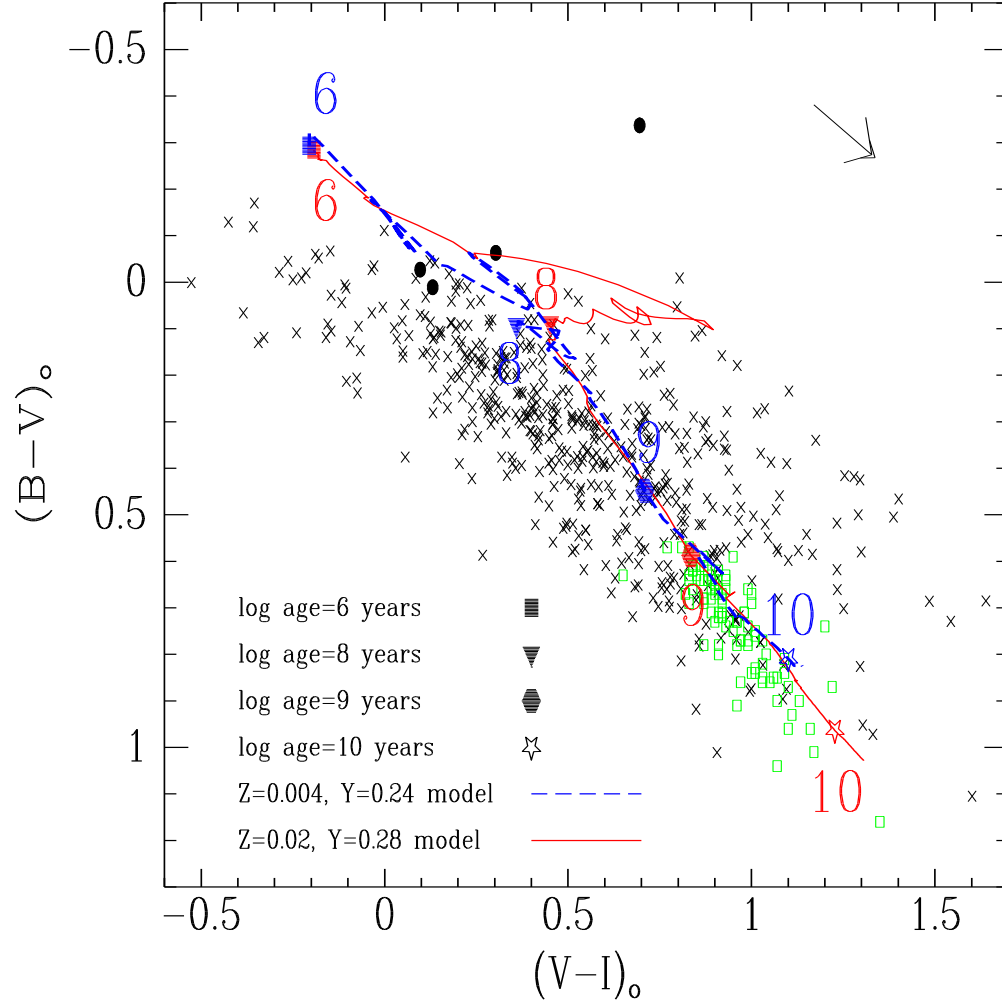


FIG. 9.— $(B-V)_0$ vs. $(V-I)_0$ color-color diagram of star clusters in M33. Crosses represent the star clusters in Ma (2012) and this study, filled circles represent the star clusters in Park & Lee (2007), San Roman et al. (2009), and Zloczewski & Kaluzny (2009). Green squares are Galactic globular clusters from the online database of Harris (1996; 2010 update). Theoretical evolutionary paths from the SSP model (Bruzual & Charlot 2003) for $Z = 0.004$, $Y = 0.24$ (blue dashed line) and $Z = 0.02$, $Y = 0.28$ (red solid line) are drawn for every dex in age from 10^6 to 10^{10} yr. The arrow represents the reddening direction.

TABLE 1
NEW *UBVRI* PHOTOMETRY OF 234 M33 STAR CLUSTERS

ID	ID	ID	ID	ID	R.A. (J2000.0)	Decl. (J2000.0)	<i>U</i> (mag)	<i>B</i> (mag)	<i>V</i> (mag)	<i>R_C</i> (mag)	<i>I_C</i> (mag)	<i>E(B - V)</i> (mag)	<i>r_{ap}</i> ($''$)
1.....	PL1				01 32 36.337	30 36 49.41	18.751 ± 0.010	19.887 ± 0.029	19.588 ± 0.029	19.076 ± 0.022	19.118 ± 0.029	0.20	2.838
2.....	PL2				01 33 11.809	30 38 57.03	16.677 ± 0.017	17.536 ± 0.018	17.326 ± 0.018	17.129 ± 0.018	17.429 ± 0.020	0.10	2.064
3.....	PL3				01 33 12.732	30 38 55.69	18.556 ± 0.016	19.075 ± 0.021	18.894 ± 0.024	18.777 ± 0.024	18.472 ± 0.023	0.10	2.064
4.....	PL4				01 33 15.038	30 39 04.94	18.604 ± 0.017	18.918 ± 0.019	18.463 ± 0.018	18.092 ± 0.018	17.700 ± 0.017	0.15	3.354
5.....	PL5				01 33 19.558	30 35 30.00	17.135 ± 0.006	17.409 ± 0.007	17.118 ± 0.006	16.951 ± 0.006	16.673 ± 0.006	0.10	2.322
6.....	PL6				01 33 20.274	30 34 49.96	17.246 ± 0.006	17.756 ± 0.011	17.570 ± 0.011	17.531 ± 0.014	17.308 ± 0.018	0.10	4.128
7.....	PL7			SR33	01 33 21.388	30 31 12.84	18.846 ± 0.013	19.219 ± 0.021	18.882 ± 0.019	18.699 ± 0.022	18.371 ± 0.022	0.08	2.322
8.....	PL8				01 33 22.398	30 35 29.93	20.540 ± 0.039	20.667 ± 0.054	20.206 ± 0.051	19.612 ± 0.043	19.136 ± 0.045	0.10	2.064
9.....	PL9				01 33 23.195	30 52 42.51	19.889 ± 0.024	19.850 ± 0.024	19.335 ± 0.023	18.953 ± 0.022	18.578 ± 0.022	0.15	3.096
10.....	PL10			SR51	01 33 26.634	30 31 30.35	18.199 ± 0.014	18.527 ± 0.019	18.148 ± 0.018	17.844 ± 0.018	17.455 ± 0.018	0.09	3.870
11.....	PL11				01 33 27.412	30 41 48.33	19.344 ± 0.020	19.544 ± 0.022	19.222 ± 0.023	19.128 ± 0.030	18.815 ± 0.032	0.20	2.064
12.....	PL13				01 33 30.266	30 41 19.22	19.120 ± 0.019	19.147 ± 0.018	18.705 ± 0.020	18.448 ± 0.022	18.167 ± 0.034	0.20	2.580
13.....	PL14			SR59	01 33 30.411	30 37 43.26	19.739 ± 0.041	19.824 ± 0.048	19.359 ± 0.044	19.015 ± 0.040	18.464 ± 0.033	0.12	2.580
14.....	PL15				01 33 30.416	30 36 41.27	19.474 ± 0.046	19.793 ± 0.060	19.499 ± 0.074	19.084 ± 0.074	18.628 ± 0.072	0.10	3.354
15.....	PL16				01 33 30.467	30 36 00.29	19.590 ± 0.042	19.564 ± 0.037	19.064 ± 0.039	18.735 ± 0.046	18.569 ± 0.072	0.10	3.354
16.....	PL17				01 33 31.330	30 37 34.10	20.309 ± 0.044	20.441 ± 0.050	19.733 ± 0.041	19.414 ± 0.045	18.834 ± 0.038	0.15	2.064
17.....	PL18			SR64	01 33 32.192	30 30 17.52	18.223 ± 0.012	18.602 ± 0.016	18.191 ± 0.016	17.961 ± 0.016	17.475 ± 0.012	0.08	2.580
18.....	PL19				01 33 32.541	30 35 38.26	16.264 ± 0.003	16.712 ± 0.005	16.378 ± 0.005	16.156 ± 0.005	15.790 ± 0.006	0.15	2.580
19.....	PL20				01 33 36.567	30 50 35.90	16.965 ± 0.007	17.810 ± 0.009	17.681 ± 0.011	17.629 ± 0.015	17.762 ± 0.017	0.15	2.580
20.....	PL21				01 33 38.183	30 43 24.09	19.231 ± 0.016	19.226 ± 0.017	18.556 ± 0.015	17.991 ± 0.014	17.313 ± 0.012	0.15	3.096
21.....	PL22				01 33 41.467	30 51 10.67	19.246 ± 0.015	19.258 ± 0.017	18.802 ± 0.017	18.441 ± 0.015	17.941 ± 0.012	0.15	3.096
22.....	PL24				01 33 58.553	30 38 20.96	17.375 ± 0.007	17.796 ± 0.009	17.584 ± 0.016	17.441 ± 0.013	17.084 ± 0.016	0.20	2.580
23.....	PL25				01 33 58.698	30 35 26.43	15.565 ± 0.005	16.425 ± 0.006	16.384 ± 0.007	16.436 ± 0.009	16.436 ± 0.010	0.10	2.580
24.....	PL26				01 34 14.466	30 34 18.01	17.046 ± 0.008	17.792 ± 0.010	17.540 ± 0.010	17.292 ± 0.012	16.694 ± 0.008	0.10	2.064
25.....	PL27				01 34 14.987	30 33 54.06	17.501 ± 0.019	18.149 ± 0.021	17.980 ± 0.021	17.836 ± 0.019	17.745 ± 0.022	0.10	2.322
26.....	PL28				01 34 15.242	30 33 15.31	19.817 ± 0.026	19.510 ± 0.019	18.774 ± 0.017	18.274 ± 0.015	17.729 ± 0.013	0.10	2.580
27.....	PL29				01 34 15.722	30 33 41.17	16.594 ± 0.011	17.317 ± 0.014	17.125 ± 0.014	16.936 ± 0.016	16.528 ± 0.016	0.10	3.354
28.....	PL30				01 34 18.103	30 31 59.14	18.223 ± 0.007	18.873 ± 0.011	18.759 ± 0.013	18.765 ± 0.016	18.727 ± 0.017	0.10	2.064
29.....	PL31				01 34 42.808	30 37 20.44	17.748 ± 0.006	18.096 ± 0.007	17.753 ± 0.007	17.390 ± 0.006	16.854 ± 0.005	0.10	2.838
30.....	PL36			SM69	01 33 22.386	30 30 14.40	17.316 ± 0.005	17.666 ± 0.007	17.392 ± 0.007	17.280 ± 0.008	16.989 ± 0.008	0.10	2.580
31.....	PL75				01 33 57.883	30 49 32.25	20.151 ± 0.033	20.380 ± 0.045	19.644 ± 0.032	19.430 ± 0.039	18.878 ± 0.038	0.10	2.580
32.....	PL197			SM297	01 34 05.461	30 47 50.74	19.622 ± 0.037	20.579 ± 0.066	20.384 ± 0.056	20.355 ± 0.085	20.359 ± 0.158	0.20	1.032
33.....	SR1				01 32 59.377	30 26 54.69	21.581 ± 0.053	21.494 ± 0.057	20.778 ± 0.043	20.349 ± 0.034	19.880 ± 0.034	0.08	1.290
34.....	SR2			25-1-008	01 32 59.948	30 27 20.04	20.730 ± 0.044	20.870 ± 0.058	20.285 ± 0.042	19.692 ± 0.030	18.788 ± 0.022	0.08	2.064
35.....	SR4				01 33 01.493	30 27 48.36	20.432 ± 0.020	20.848 ± 0.034	20.646 ± 0.038	20.632 ± 0.053	20.304 ± 0.059	0.05	1.290
36.....	SR5			25-1-003	01 33 02.386	30 26 56.20	21.078 ± 0.067	21.056 ± 0.076	20.951 ± 0.087	20.721 ± 0.074	20.341 ± 0.069	0.08	1.806
37.....	SR6			25-1-001	01 33 02.983	30 26 35.05	20.698 ± 0.044	20.512 ± 0.047	19.847 ± 0.034	19.287 ± 0.024	18.571 ± 0.015	0.08	2.322
38.....	SR7			34-2-001	01 33 03.427	30 16 01.98	21.308 ± 0.044	21.178 ± 0.040	20.658 ± 0.041	20.440 ± 0.054	19.965 ± 0.064	0.08	2.580
39.....	SR8				01 33 04.350	30 27 13.77	20.778 ± 0.045	20.996 ± 0.063	20.395 ± 0.047	20.025 ± 0.042	19.874 ± 0.052	0.08	1.806
40.....	SR9			33-4-018	01 33 05.756	30 14 23.15	20.132 ± 0.020	20.048 ± 0.022	19.669 ± 0.026	19.381 ± 0.026	19.033 ± 0.029	0.08	3.096
41.....	SR10				01 33 05.869	30 28 49.94	19.665 ± 0.027	20.114 ± 0.036	19.729 ± 0.036	19.581 ± 0.033	19.161 ± 0.030	0.08	2.064
42.....	SR12			33-5-022	01 33 09.063	30 16 51.39	22.384 ± 0.055	22.377 ± 0.064	21.637 ± 0.054	21.273 ± 0.047	20.758 ± 0.049	0.08	1.290
43.....	SR13				01 33 09.267	30 26 07.27	20.202 ± 0.034	20.204 ± 0.040	19.846 ± 0.041	19.524 ± 0.038	19.405 ± 0.049	0.08	2.580
44.....	SR14				01 33 09.829	30 22 35.35	17.991 ± 0.009	18.121 ± 0.011	17.733 ± 0.009	17.483 ± 0.008	17.093 ± 0.007	0.05	3.096
45.....	SR16			33-5-019	01 33 10.516	30 15 45.72	22.415 ± 0.133	22.142 ± 0.096	21.663 ± 0.113	21.206 ± 0.107	20.572 ± 0.109	0.12	2.580
46.....	SR17			33-6-014	01 33 12.198	30 22 36.89	21.020 ± 0.106	20.920 ± 0.100	20.297 ± 0.069	19.778 ± 0.050	19.159 ± 0.033	0.05	2.580
47.....	SR18			33-6-010	01 33 13.012	30 23 07.11	18.419 ± 0.012	19.227 ± 0.023	19.296 ± 0.028	19.448 ± 0.039	19.585 ± 0.052	0.05	2.322
48.....	SR19				01 33 13.923	30 28 00.51	19.960 ± 0.030	20.010 ± 0.038	19.377 ± 0.030	19.076 ± 0.029	18.692 ± 0.025	0.10	2.838
49.....	SR20			33-5-014	01 33 14.085	30 14 31.61	21.609 ± 0.055	21.245 ± 0.042	20.612 ± 0.039	20.210 ± 0.043	19.639 ± 0.038	0.12	2.580
50.....	SR21			33-5-013	01 33 14.165	30 15 16.17	20.845 ± 0.038	20.949 ± 0.042	20.483 ± 0.055	20.369 ± 0.071	20.059 ± 0.097	0.15	3.096
51.....	SR23			33-6-009	01 33 14.772	30 23 18.97	20.848 ± 0.069	20.428 ± 0.052	19.611 ± 0.031	19.209 ± 0.029	18.700 ± 0.023	0.12	2.322
52.....	SR24			33-6-008	01 33 15.208	30 21 14.24	19.267 ± 0.012	19.726 ± 0.017	19.717 ± 0.025	19.671 ± 0.032	19.511 ± 0.054	0.05	2.580
53.....	SR26				01 33 19.101	30 30 10.99	19.346 ± 0.031	19.519 ± 0.039	18.975 ± 0.035	18.693 ± 0.036	18.254 ± 0.032	0.05	3.870
54.....	SR27			SM57	01 33 19.217	30 23 22.56	19.418 ± 0.029	19.251 ± 0.030	18.493 ± 0.017	18.122 ± 0.014	.....	0.05	3.612
55.....	SR28				01 33 19.918	30 30 20.30	20.479 ± 0.065	20.676 ± 0.095	18.854 ± 0.064	19.192 ± 0.049	18.438 ± 0.036	0.12	3.096
56.....	SR30			33-3-020	01 33 21.299	30 20 32.05	18.387 ± 0.007	18.558 ± 0.009	18.312 ± 0.009	18.175 ± 0.010	17.883 ± 0.013	0.05	3.096

TABLE 1
(CONTINUED.)

ID	ID	ID	ID	ID	R.A. (J2000.0)	Decl. (J2000.0)	U (mag)	B (mag)	V (mag)	R_C (mag)	I_C (mag)	$E(B - V)$ (mag)	r_{ap} ($''$)
57.....	SR31				01 33 21.347	30 31 01.10	20.644 \pm 0.068	20.353 \pm 0.056	19.354 \pm 0.028	18.857 \pm 0.024	18.194 \pm 0.018	0.12	3.096
58.....	SR32				01 33 21.375	30 31 32.05	18.167 \pm 0.011	19.081 \pm 0.020	18.900 \pm 0.022	18.711 \pm 0.023	18.371 \pm 0.022	0.10	2.322
59.....	SR34	SM62			01 33 21.579	30 31 51.05	19.093 \pm 0.023	19.231 \pm 0.024	18.515 \pm 0.018	18.005 \pm 0.014	17.468 \pm 0.011	0.10	2.838
60.....	SR37				01 33 22.215	30 38 27.90	19.608 \pm 0.033	19.881 \pm 0.045	19.342 \pm 0.038	18.948 \pm 0.036	18.462 \pm 0.033	0.05	2.838
61.....	SR38	SM69			01 33 22.386	30 30 14.40	17.117 \pm 0.007	17.483 \pm 0.009	17.205 \pm 0.009	17.075 \pm 0.011	16.729 \pm 0.011	0.05	4.644
62.....	SR39				01 33 22.746	30 38 00.01	20.597 \pm 0.063	20.478 \pm 0.064	19.848 \pm 0.058	19.246 \pm 0.045	18.480 \pm 0.032	0.05	2.838
63.....	SR40				01 33 22.833	30 38 19.72	19.909 \pm 0.028	20.211 \pm 0.042	19.744 \pm 0.040	19.181 \pm 0.032	18.581 \pm 0.028	0.08	2.322
64.....	SR43				01 33 23.918	30 39 36.47	19.800 \pm 0.024	19.777 \pm 0.027	19.383 \pm 0.026	19.239 \pm 0.031	18.934 \pm 0.034	0.12	2.064
65.....	SR44				01 33 24.686	30 37 49.64	19.944 \pm 0.044	19.912 \pm 0.042	19.234 \pm 0.033	18.726 \pm 0.030	18.024 \pm 0.026	0.08	2.838
66.....	SR45				01 33 25.168	30 32 18.26	21.887 \pm 0.073	21.701 \pm 0.083	21.159 \pm 0.060	20.616 \pm 0.047	20.311 \pm 0.055	0.08	1.548
67.....	SR46				01 33 25.325	30 23 39.17	21.026 \pm 0.077	21.189 \pm 0.104	20.798 \pm 0.084	20.392 \pm 0.073	19.819 \pm 0.055	0.08	2.580
68.....	SR47		33-2-010		01 33 25.722	30 18 01.09	20.227 \pm 0.019	20.631 \pm 0.026	20.589 \pm 0.035	20.604 \pm 0.048	20.435 \pm 0.066	0.05	1.548
69.....	SR48				01 33 25.766	30 31 20.00	21.035 \pm 0.062	21.037 \pm 0.074	20.380 \pm 0.054	20.073 \pm 0.053	19.571 \pm 0.050	0.08	2.064
70.....	SR49				01 33 26.508	30 30 02.01	20.441 \pm 0.051	20.535 \pm 0.064	19.846 \pm 0.048	19.435 \pm 0.045	18.964 \pm 0.039	0.08	2.838
71.....	SR50				01 33 26.602	30 37 55.04	20.142 \pm 0.085	20.856 \pm 0.158	20.670 \pm 0.174	20.254 \pm 0.153	20.231 \pm 0.205	0.05	2.580
72.....	SR52				01 33 27.444	30 30 03.71	19.283 \pm 0.022	19.266 \pm 0.023	18.712 \pm 0.019	18.281 \pm 0.016	17.718 \pm 0.011	0.12	3.096
73.....	SR53				01 33 27.791	30 38 48.59	19.059 \pm 0.019	18.638 \pm 0.015	17.934 \pm 0.011	17.572 \pm 0.010	17.151 \pm 0.011	0.10	3.096
74.....	SR54				01 33 29.272	30 29 13.98	19.695 \pm 0.019	19.871 \pm 0.027	19.386 \pm 0.022	19.088 \pm 0.018	18.754 \pm 0.016	0.05	1.806
75.....	SR56				01 33 29.568	30 29 34.68	19.893 \pm 0.025	20.185 \pm 0.038	19.823 \pm 0.035	19.502 \pm 0.038	18.997 \pm 0.035	0.05	2.064
76.....	SR57				01 33 29.883	30 31 16.41	19.696 \pm 0.032	19.900 \pm 0.041	19.418 \pm 0.036	19.016 \pm 0.035	18.578 \pm 0.034	0.05	2.580
77.....	SR58				01 33 30.193	30 29 33.97	20.791 \pm 0.045	21.037 \pm 0.055	20.601 \pm 0.047	20.314 \pm 0.044	19.955 \pm 0.044	0.05	1.548
78.....	SR60				01 33 30.847	30 29 14.41	18.260 \pm 0.009	18.607 \pm 0.013	18.396 \pm 0.013	18.209 \pm 0.013	17.889 \pm 0.013	0.08	2.322
79.....	SR62				01 33 31.510	30 28 42.08	18.788 \pm 0.016	18.803 \pm 0.019	18.463 \pm 0.017	18.157 \pm 0.016	17.691 \pm 0.015	0.15	3.354
80.....	SR68				01 33 32.944	30 39 31.66	19.590 \pm 0.027	19.757 \pm 0.034	19.464 \pm 0.045	19.403 \pm 0.069	19.458 \pm 0.117	0.08	2.580
81.....	SR69		33-2-003		01 33 32.877	30 15 46.75	20.199 \pm 0.018	20.348 \pm 0.022	20.124 \pm 0.025	20.035 \pm 0.029	19.586 \pm 0.032	0.08	2.322
82.....	SR70				01 33 33.436	30 29 45.80	19.001 \pm 0.012	19.535 \pm 0.021	19.381 \pm 0.025	19.105 \pm 0.027	18.447 \pm 0.022	0.05	2.322
83.....	SR71				01 33 33.696	30 28 09.65	18.234 \pm 0.011	18.558 \pm 0.014	18.331 \pm 0.014	18.354 \pm 0.021	18.287 \pm 0.028	0.08	2.838
84.....	SR73				01 33 33.959	30 39 53.96	18.668 \pm 0.020	18.992 \pm 0.026	18.538 \pm 0.025	18.244 \pm 0.031	17.531 \pm 0.025	0.05	3.870
85.....	SR75				01 33 35.935	30 27 44.61	20.227 \pm 0.047	20.507 \pm 0.063	20.068 \pm 0.056	19.916 \pm 0.061	19.650 \pm 0.073	0.05	2.580
86.....	SR76				01 33 36.307	30 27 56.79	20.424 \pm 0.047	20.340 \pm 0.051	19.859 \pm 0.051	19.477 \pm 0.051	19.034 \pm 0.049	0.08	2.580
87.....	SR77		32-5-024		01 33 36.375	30 15 32.54	22.039 \pm 0.040	21.953 \pm 0.044	21.538 \pm 0.046	21.257 \pm 0.049	20.709 \pm 0.047	0.08	1.290
88.....	SR79				01 33 37.421	30 38 38.47	19.735 \pm 0.025	19.989 \pm 0.038	19.533 \pm 0.037	19.403 \pm 0.046	19.076 \pm 0.060	0.08	1.806
89.....	SR82				01 33 37.929	30 18 51.70	21.042 \pm 0.029	20.948 \pm 0.029	20.512 \pm 0.028	20.239 \pm 0.029	19.926 \pm 0.034	0.08	1.548
90.....	SR83				01 33 38.279	30 17 35.97	20.528 \pm 0.028	20.556 \pm 0.027	20.081 \pm 0.031	19.575 \pm 0.026	18.716 \pm 0.020	0.05	2.580
91.....	SR84				01 33 39.182	30 38 25.07	17.204 \pm 0.011	17.942 \pm 0.016	17.658 \pm 0.015	17.327 \pm 0.013	16.487 \pm 0.007	0.05	2.064
92.....	SR85				01 33 39.533	30 28 07.40	21.459 \pm 0.098	21.161 \pm 0.094	20.109 \pm 0.051	19.457 \pm 0.044	18.668 \pm 0.031	0.08	2.322
93.....	SR88				01 33 40.214	30 37 45.63	18.397 \pm 0.020	18.549 \pm 0.021	18.107 \pm 0.021	17.883 \pm 0.019	17.442 \pm 0.022	0.08	3.096
94.....	SR90				01 33 41.498	30 31 13.40	17.715 \pm 0.011	18.407 \pm 0.017	18.164 \pm 0.020	18.045 \pm 0.024	17.722 \pm 0.025	0.08	3.354
95.....	SR93				01 33 41.733	30 34 57.79	19.336 \pm 0.024	19.851 \pm 0.040	19.582 \pm 0.049	19.490 \pm 0.075	19.147 \pm 0.091	0.08	3.096
96.....	SR94				01 33 41.832	30 29 32.59	18.130 \pm 0.015	18.405 \pm 0.020	18.005 \pm 0.019	17.832 \pm 0.020	17.496 \pm 0.023	0.08	4.644
97.....	SR95				01 33 42.073	30 38 20.38	18.702 \pm 0.029	18.798 \pm 0.036	18.303 \pm 0.039	18.076 \pm 0.046	17.613 \pm 0.046	0.12	3.096
98.....	SR96				01 33 42.661	30 34 59.21	20.363 \pm 0.053	20.433 \pm 0.067	19.765 \pm 0.047	19.326 \pm 0.047	18.463 \pm 0.037	0.05	2.580
99.....	SR97				01 33 42.709	30 38 21.92	18.577 \pm 0.027	18.987 \pm 0.042	18.643 \pm 0.048	18.341 \pm 0.048	17.746 \pm 0.044	0.08	3.354
100.....	SR98				01 33 42.956	30 27 46.54	19.986 \pm 0.051	19.873 \pm 0.050	19.302 \pm 0.041	18.893 \pm 0.040	18.259 \pm 0.030	0.08	3.354
101.....	SR99				01 33 42.990	30 38 30.72	18.675 \pm 0.016	19.132 \pm 0.023	18.738 \pm 0.023	18.508 \pm 0.035	18.302 \pm 0.052	0.10	2.580
102.....	SR100				01 33 43.535	30 28 08.32	19.596 \pm 0.036	19.549 \pm 0.039	18.906 \pm 0.029	18.431 \pm 0.022	17.931 \pm 0.019	0.05	3.612
103.....	SR101				01 33 43.598	30 27 58.42	18.273 \pm 0.009	18.432 \pm 0.011	18.127 \pm 0.011	17.995 \pm 0.012	17.786 \pm 0.013	0.08	2.580
104.....	SR102				01 33 43.964	30 36 13.40	19.670 \pm 0.059	19.672 \pm 0.056	19.043 \pm 0.043	18.668 \pm 0.040	18.462 \pm 0.050	0.05	2.322
105.....	SR104				01 33 44.197	30 35 25.77	19.388 \pm 0.036	19.679 \pm 0.042	19.090 \pm 0.032	18.853 \pm 0.036	18.422 \pm 0.038	0.15	2.838
106.....	SR105				01 33 44.437	30 38 05.20	18.486 \pm 0.015	18.805 \pm 0.020	18.701 \pm 0.029	18.632 \pm 0.043	18.637 \pm 0.077	0.05	2.580
107.....	SR107				01 33 44.527	30 37 07.18	19.835 \pm 0.033	20.318 \pm 0.056	20.107 \pm 0.065	19.971 \pm 0.095	19.988 \pm 0.162	0.05	2.580
108.....	SR108				01 33 44.530	30 36 43.85	20.268 \pm 0.037	20.611 \pm 0.048	19.989 \pm 0.045	19.443 \pm 0.040	18.729 \pm 0.034	0.08	1.806
109.....	SR109				01 33 44.617	30 39 19.44	18.696 \pm 0.034	18.845 \pm 0.043	18.411 \pm 0.047	17.872 \pm 0.039	17.535 \pm 0.046	0.12	3.612
110.....	SR110				01 33 44.656	30 37 34.00	19.732 \pm 0.026	19.759 \pm 0.030	19.390 \pm 0.030	19.182 \pm 0.037	19.081 \pm 0.053	0.12	2.064
111.....	SR111				01 33 44.683	30 36 35.91	17.198 \pm 0.005	18.119 \pm 0.009	18.089 \pm 0.011	18.191 \pm 0.016	18.234 \pm 0.030	0.05	1.806
112.....	SR112				01 33 44.880	30 34 39.19	18.529 \pm 0.019	19.175 \pm 0.025	18.976 \pm 0.028	19.008 \pm 0.042	18.791 \pm 0.054	0.05	2.064

TABLE 1
(CONTINUED.)

ID	ID	ID	ID	ID	R.A. (J2000.0)	Decl. (J2000.0)	U (mag)	B (mag)	V (mag)	R_C (mag)	I_C (mag)	$E(B - V)$ (mag)	r_{ap} ($''$)
113.....	SR113				01 33 45.999	30 36 49.63	18.000 \pm 0.017	18.775 \pm 0.017	18.597 \pm 0.021	18.549 \pm 0.033	18.461 \pm 0.040	0.08	2.064
114.....	SR115				01 33 46.790	30 35 59.27	20.428 \pm 0.029	20.539 \pm 0.031	19.985 \pm 0.029	19.549 \pm 0.029	19.056 \pm 0.024	0.12	1.548
115.....	SR116				01 33 47.436	30 39 59.21	20.204 \pm 0.054	20.022 \pm 0.043	19.566 \pm 0.046	19.425 \pm 0.064	19.400 \pm 0.133	0.08	1.548
116.....	SR117				01 33 47.530	30 39 03.58	18.437 \pm 0.031	18.709 \pm 0.042	18.329 \pm 0.048	18.117 \pm 0.054	17.804 \pm 0.065	0.05	2.838
117.....	SR118				01 33 48.139	30 39 28.85	19.589 \pm 0.046	20.117 \pm 0.066	19.533 \pm 0.066	19.068 \pm 0.067	18.425 \pm 0.063	0.10	1.290
118.....	SR119				01 33 48.590	30 37 05.48	18.387 \pm 0.011	18.927 \pm 0.015	18.430 \pm 0.015	18.080 \pm 0.015	17.593 \pm 0.014	0.19	2.064
119.....	SR120				01 33 48.620	30 35 23.60	19.902 \pm 0.027	19.800 \pm 0.026	19.218 \pm 0.028	18.983 \pm 0.033	18.633 \pm 0.036	0.12	2.322
120.....	SR121				01 33 49.581	30 28 42.55	20.386 \pm 0.028	20.417 \pm 0.031	20.007 \pm 0.031	19.804 \pm 0.032	19.530 \pm 0.035	0.15	1.806
121.....	SR123				01 33 49.913	30 36 34.63	18.118 \pm 0.009	18.460 \pm 0.011	18.063 \pm 0.013	17.793 \pm 0.011	17.319 \pm 0.011	0.05	1.548
122.....	SR125				01 33 51.018	30 35 24.78	20.738 \pm 0.032	20.782 \pm 0.040	20.205 \pm 0.041	19.935 \pm 0.062	19.488 \pm 0.064	0.10	1.806
123.....	SR127				01 33 51.825	30 34 18.77	20.920 \pm 0.050	21.004 \pm 0.054	20.294 \pm 0.053	20.002 \pm 0.059	19.554 \pm 0.067	0.10	2.064
124.....	SR131				01 33 54.192	30 36 07.06	20.315 \pm 0.040	20.318 \pm 0.042	19.829 \pm 0.047	19.473 \pm 0.055	18.897 \pm 0.060	0.15	2.838
125.....	SR132				01 33 54.267	30 32 22.83	19.138 \pm 0.027	19.612 \pm 0.036	19.192 \pm 0.043	18.858 \pm 0.050	18.152 \pm 0.042	0.12	2.838
126.....	SR136				01 33 55.765	30 33 44.78	19.299 \pm 0.047	19.332 \pm 0.038	18.580 \pm 0.030	18.213 \pm 0.031	17.619 \pm 0.024	0.08	3.354
127.....	SR138				01 33 57.201	30 34 15.32	17.882 \pm 0.009	18.629 \pm 0.013	18.614 \pm 0.017	18.680 \pm 0.026	18.574 \pm 0.036	0.05	2.064
128.....	SR142				01 33 58.997	30 33 29.49	20.015 \pm 0.054	20.280 \pm 0.051	19.778 \pm 0.053	19.472 \pm 0.053	19.430 \pm 0.078	0.08	2.064
129.....	SR144				01 33 59.561	30 36 24.60	18.377 \pm 0.011	18.948 \pm 0.018	18.605 \pm 0.020	18.350 \pm 0.022	18.053 \pm 0.027	0.08	2.322
130.....	SR145				01 33 59.825	30 32 00.25	19.760 \pm 0.024	20.070 \pm 0.028	19.485 \pm 0.028	19.085 \pm 0.029	18.454 \pm 0.024	0.10	2.322
131.....	SR148				01 34 01.858	30 34 06.34	20.148 \pm 0.055	20.183 \pm 0.048	19.644 \pm 0.050	19.360 \pm 0.060	18.768 \pm 0.062	0.09	2.838
132.....	SR149				01 34 02.372	30 32 37.91	19.843 \pm 0.028	19.750 \pm 0.028	18.876 \pm 0.022	18.325 \pm 0.019	17.714 \pm 0.018	0.10	3.096
133.....	SR150				01 34 03.297	30 27 56.11	17.794 \pm 0.006	18.052 \pm 0.008	17.711 \pm 0.009	17.530 \pm 0.010	17.223 \pm 0.010	0.05	3.870
134.....	SR151				01 34 03.556	30 33 41.65	19.440 \pm 0.021	19.552 \pm 0.024	19.133 \pm 0.026	18.813 \pm 0.031	18.603 \pm 0.041	0.08	2.838
135.....	SR152				01 34 04.651	30 27 21.63	20.010 \pm 0.023	20.377 \pm 0.028	19.951 \pm 0.031	19.708 \pm 0.036	19.208 \pm 0.033	0.05	2.580
136.....	SR153				01 34 06.736	30 28 04.38	19.348 \pm 0.017	19.561 \pm 0.019	19.157 \pm 0.018	18.766 \pm 0.018	18.444 \pm 0.019	0.05	3.354
137.....	SR155				01 34 08.048	30 31 18.95	19.428 \pm 0.017	19.468 \pm 0.020	19.026 \pm 0.022	18.649 \pm 0.025	18.013 \pm 0.019	0.10	3.096
138.....	SR156				01 34 09.691	30 25 05.00	19.821 \pm 0.020	20.094 \pm 0.023	19.907 \pm 0.028	19.703 \pm 0.030	19.589 \pm 0.039	0.05	2.580
139.....	SR157				01 34 12.933	30 28 46.25	17.959 \pm 0.007	18.310 \pm 0.010	17.964 \pm 0.011	17.765 \pm 0.012	17.450 \pm 0.013	0.08	3.870
140.....	SR158				01 34 13.533	30 28 44.05	20.437 \pm 0.044	20.362 \pm 0.037	19.621 \pm 0.035	19.190 \pm 0.032	18.277 \pm 0.022	0.08	3.354
141.....	SR160				01 34 17.779	30 27 08.90	20.848 \pm 0.034	20.904 \pm 0.037	20.426 \pm 0.036	19.956 \pm 0.033	19.653 \pm 0.040	0.12	2.322
142.....	SR161				01 34 18.660	30 27 19.19	20.336 \pm 0.023	20.492 \pm 0.027	19.925 \pm 0.024	19.493 \pm 0.024	18.992 \pm 0.022	0.08	2.580
143.....	33-6-019				01 33 07.710	30 19 38.09	21.493 \pm 0.042	21.539 \pm 0.046	20.861 \pm 0.043	20.286 \pm 0.036	19.596 \pm 0.035	0.10	2.064
144.....	33-6-017				01 33 08.519	30 23 29.84	21.020 \pm 0.052	20.981 \pm 0.057	20.506 \pm 0.045	20.230 \pm 0.043	19.829 \pm 0.036	0.10	1.806
145.....	33-6-012				01 33 12.394	30 21 59.29	20.696 \pm 0.121	20.364 \pm 0.081	19.545 \pm 0.042	19.173 \pm 0.037	18.732 \pm 0.033	0.10	3.354
146.....	33-5-015				01 33 13.260	30 15 39.84	22.576 \pm 0.072	22.583 \pm 0.085	22.091 \pm 0.092	21.886 \pm 0.099	21.454 \pm 0.128	0.10	1.548
147.....	33-5-011				01 33 14.913	30 14 38.93	20.521 \pm 0.023	20.972 \pm 0.033	20.732 \pm 0.041	20.572 \pm 0.053	20.208 \pm 0.056	0.10	2.322
148.....	33-2-006				01 33 29.844	30 18 33.14	19.359 \pm 0.015	20.342 \pm 0.022	20.196 \pm 0.022	19.824 \pm 0.023	19.824 \pm 0.029	0.10	1.290
149.....	ZK-1				01 33 05.869	30 28 49.94	19.665 \pm 0.027	20.114 \pm 0.036	19.729 \pm 0.036	19.581 \pm 0.033	19.161 \pm 0.030	0.10	2.064
150.....	ZK-2				01 33 09.267	30 26 07.27	20.202 \pm 0.034	20.204 \pm 0.040	19.846 \pm 0.041	19.524 \pm 0.038	19.405 \pm 0.049	0.10	2.580
151.....	ZK-3				01 33 11.693	30 16 03.26	21.431 \pm 0.038	21.865 \pm 0.059	21.763 \pm 0.080	21.863 \pm 0.111	22.153 \pm 0.263	0.10	1.806
152.....	ZK-4				01 33 11.827	30 25 49.15	20.621 \pm 0.041	20.814 \pm 0.060	20.404 \pm 0.050	19.967 \pm 0.041	19.491 \pm 0.034	0.10	2.064
153.....	ZK-5				01 33 13.923	30 28 00.51	19.960 \pm 0.030	20.010 \pm 0.038	19.377 \pm 0.030	19.076 \pm 0.029	18.692 \pm 0.025	0.10	2.838
154.....	ZK-6				01 33 17.765	30 23 17.03	23.104 \pm 0.283	22.709 \pm 0.207	21.690 \pm 0.099	21.339 \pm 0.084	20.704 \pm 0.060	0.10	1.548
155.....	ZK-7				01 33 20.722	30 20 50.01	22.174 \pm 0.068	22.017 \pm 0.066	21.272 \pm 0.052	20.910 \pm 0.051	20.378 \pm 0.062	0.10	1.806
156.....	ZK-8				01 33 21.347	30 31 01.10	20.985 \pm 0.040	20.815 \pm 0.046	20.074 \pm 0.033	19.532 \pm 0.030	18.935 \pm 0.026	0.10	1.548
157.....	ZK-9				01 33 22.215	30 38 27.90	19.608 \pm 0.033	19.893 \pm 0.045	19.342 \pm 0.038	18.948 \pm 0.036	18.462 \pm 0.033	0.10	2.838
158.....	ZK-10				01 33 22.737	30 37 59.15	21.025 \pm 0.057	20.721 \pm 0.047	20.103 \pm 0.041	19.496 \pm 0.035	18.733 \pm 0.026	0.10	2.064
159.....	ZK-11				01 33 22.833	30 38 19.72	19.909 \pm 0.028	20.211 \pm 0.042	19.744 \pm 0.040	19.181 \pm 0.032	18.581 \pm 0.028	0.10	2.322
160.....	ZK-12				01 33 23.590	30 29 53.53	21.663 \pm 0.104	21.690 \pm 0.110	21.016 \pm 0.076	20.410 \pm 0.056	20.360 \pm 0.077	0.10	1.806
161.....	ZK-13				01 33 23.918	30 39 36.47	19.800 \pm 0.024	19.777 \pm 0.027	19.388 \pm 0.026	19.239 \pm 0.031	18.934 \pm 0.034	0.10	2.064
162.....	ZK-14				01 33 24.142	30 31 43.24	20.548 \pm 0.040	20.460 \pm 0.044	20.025 \pm 0.041	19.732 \pm 0.037	19.302 \pm 0.031	0.10	2.064
163.....	ZK-15				01 33 24.686	30 37 49.64	19.944 \pm 0.044	19.912 \pm 0.042	19.234 \pm 0.033	18.726 \pm 0.030	18.024 \pm 0.026	0.10	2.838
164.....	ZK-16				01 33 25.168	30 32 18.26	22.087 \pm 0.122	21.770 \pm 0.128	21.005 \pm 0.072	20.475 \pm 0.061	19.959 \pm 0.059	0.10	2.064
165.....	ZK-17				01 33 25.325	30 23 39.17	21.197 \pm 0.092	21.189 \pm 0.104	20.798 \pm 0.084	20.392 \pm 0.073	19.819 \pm 0.055	0.10	2.580
166.....	ZK-18				01 33 25.766	30 31 20.00	21.092 \pm 0.053	21.139 \pm 0.070	20.474 \pm 0.050	20.201 \pm 0.052	19.782 \pm 0.052	0.10	1.806
167.....	ZK-19				01 33 25.954	30 31 21.71	21.055 \pm 0.048	21.001 \pm 0.065	20.569 \pm 0.059	20.204 \pm 0.065	19.506 \pm 0.052	0.10	1.806
168.....	ZK-20				01 33 26.504	30 39 59.50	19.959 \pm 0.028	19.949 \pm 0.034	19.452 \pm 0.030	19.214 \pm 0.034	18.718 \pm 0.034	0.10	2.580

TABLE 1
(CONTINUED.)

ID	ID	ID	ID	ID	R.A. (J2000.0)	Decl. (J2000.0)	U (mag)	B (mag)	V (mag)	R_C (mag)	I_C (mag)	$E(B - V)$ (mag)	r_{ap} ($''$)
169.....	ZK-23				01 33 30.847	30 29 14.41	18.260 \pm 0.009	18.607 \pm 0.013	18.396 \pm 0.013	18.209 \pm 0.013	17.889 \pm 0.013	0.10	2.322
170.....	ZK-24				01 33 31.510	30 28 42.08	18.953 \pm 0.014	18.933 \pm 0.016	18.541 \pm 0.015	18.304 \pm 0.015	17.796 \pm 0.013	0.10	2.580
171.....	ZK-25				01 33 32.378	30 17 36.35	22.222 \pm 0.060	22.181 \pm 0.065	21.725 \pm 0.062	21.403 \pm 0.066	20.771 \pm 0.061	0.10	1.548
172.....	ZK-26				01 33 33.436	30 29 45.80	19.001 \pm 0.012	19.535 \pm 0.021	19.381 \pm 0.025	19.105 \pm 0.027	18.447 \pm 0.022	0.10	2.322
173.....	ZK-27				01 33 33.696	30 28 09.65	18.234 \pm 0.011	18.558 \pm 0.014	18.331 \pm 0.014	18.354 \pm 0.021	18.287 \pm 0.028	0.10	2.838
174.....	ZK-29				01 33 33.959	30 39 53.96	19.079 \pm 0.019	19.342 \pm 0.024	18.847 \pm 0.024	18.492 \pm 0.022	17.985 \pm 0.026	0.10	2.580
175.....	ZK-30				01 33 34.280	30 29 00.58	21.097 \pm 0.086	21.225 \pm 0.102	20.230 \pm 0.054	19.718 \pm 0.050	19.007 \pm 0.035	0.10	2.580
176.....	ZK-31				01 33 35.935	30 27 44.61	20.331 \pm 0.032	20.608 \pm 0.045	20.227 \pm 0.044	20.122 \pm 0.051	19.957 \pm 0.070	0.10	1.806
177.....	ZK-32				01 33 36.307	30 27 56.79	20.490 \pm 0.032	20.438 \pm 0.036	19.904 \pm 0.031	19.535 \pm 0.032	19.064 \pm 0.030	0.10	1.806
178.....	ZK-33				01 33 37.540	30 26 59.09	20.363 \pm 0.033	20.638 \pm 0.049	20.148 \pm 0.042	20.019 \pm 0.051	19.807 \pm 0.057	0.10	1.806
179.....	ZK-34				01 33 37.700	30 28 41.13	21.006 \pm 0.052	21.100 \pm 0.070	20.617 \pm 0.054	20.344 \pm 0.052	20.025 \pm 0.046	0.10	2.064
180.....	ZK-35				01 33 37.929	30 18 51.70	21.042 \pm 0.029	20.948 \pm 0.029	20.512 \pm 0.028	20.239 \pm 0.029	19.926 \pm 0.034	0.10	1.548
181.....	ZK-36				01 33 39.533	30 28 07.40	21.459 \pm 0.098	21.161 \pm 0.094	20.109 \pm 0.051	19.457 \pm 0.044	18.668 \pm 0.031	0.10	2.322
182.....	ZK-37				01 33 40.214	30 37 45.63	18.532 \pm 0.012	18.689 \pm 0.016	18.293 \pm 0.015	18.052 \pm 0.017	17.643 \pm 0.022	0.10	2.322
183.....	ZK-38				01 33 40.437	30 35 40.33	16.151 \pm 0.005	16.844 \pm 0.007	16.724 \pm 0.008	16.692 \pm 0.010	16.393 \pm 0.011	0.10	2.580
184.....	ZK-39				01 33 40.672	30 18 25.96	21.157 \pm 0.049	21.214 \pm 0.054	20.984 \pm 0.064	20.632 \pm 0.067	20.580 \pm 0.107	0.10	2.580
185.....	ZK-40				01 33 41.498	30 31 13.40	17.896 \pm 0.007	18.619 \pm 0.011	18.474 \pm 0.011	18.485 \pm 0.014	18.454 \pm 0.021	0.10	1.806
186.....	ZK-41				01 33 41.832	30 29 32.59	19.196 \pm 0.016	19.588 \pm 0.024	19.221 \pm 0.019	18.997 \pm 0.021	18.801 \pm 0.021	0.10	1.032
187.....	ZK-42				01 33 41.878	30 29 34.05	19.891 \pm 0.025	20.397 \pm 0.040	20.175 \pm 0.035	20.146 \pm 0.041	20.004 \pm 0.041	0.10	0.774
188.....	ZK-43				01 33 41.892	30 36 02.13	18.676 \pm 0.014	19.277 \pm 0.022	18.837 \pm 0.023	18.365 \pm 0.021	17.525 \pm 0.015	0.10	1.548
189.....	ZK-44				01 33 42.073	30 38 20.38	18.891 \pm 0.028	19.128 \pm 0.042	18.652 \pm 0.049	18.516 \pm 0.064	17.948 \pm 0.056	0.10	2.580
190.....	ZK-45				01 33 42.661	30 34 59.21	21.091 \pm 0.081	20.931 \pm 0.073	20.007 \pm 0.048	19.529 \pm 0.048	18.783 \pm 0.039	0.10	2.064
191.....	ZK-46				01 33 42.709	30 38 21.92	18.657 \pm 0.025	19.065 \pm 0.037	18.784 \pm 0.045	18.465 \pm 0.047	17.895 \pm 0.048	0.10	2.838
192.....	ZK-47				01 33 42.956	30 27 46.54	20.572 \pm 0.034	20.640 \pm 0.049	20.121 \pm 0.040	19.868 \pm 0.041	19.303 \pm 0.034	0.10	1.548
193.....	ZK-48				01 33 42.990	30 38 30.72	19.136 \pm 0.016	19.436 \pm 0.022	19.066 \pm 0.019	18.898 \pm 0.021	18.690 \pm 0.036	0.10	1.548
194.....	ZK-49				01 33 43.535	30 28 08.32	20.081 \pm 0.021	20.000 \pm 0.024	19.442 \pm 0.019	19.020 \pm 0.018	18.635 \pm 0.018	0.10	1.548
195.....	ZK-50				01 33 43.598	30 27 58.42	18.273 \pm 0.009	18.432 \pm 0.011	18.127 \pm 0.011	17.995 \pm 0.012	17.786 \pm 0.013	0.10	2.580
196.....	ZK-51				01 33 43.964	30 36 13.40	19.997 \pm 0.042	20.140 \pm 0.043	19.596 \pm 0.037	19.203 \pm 0.037	18.924 \pm 0.043	0.10	1.548
197.....	ZK-52				01 33 44.197	30 35 25.77	19.435 \pm 0.034	19.726 \pm 0.039	19.190 \pm 0.031	18.928 \pm 0.034	18.545 \pm 0.038	0.10	2.580
198.....	ZK-53				01 33 44.656	30 37 34.00	19.732 \pm 0.026	19.759 \pm 0.030	19.390 \pm 0.030	19.182 \pm 0.037	19.081 \pm 0.053	0.10	2.064
199.....	ZK-54				01 33 44.683	30 36 35.91	17.515 \pm 0.005	18.472 \pm 0.010	18.418 \pm 0.010	18.491 \pm 0.013	18.543 \pm 0.020	0.10	1.032
200.....	ZK-55				01 33 44.880	30 34 39.19	18.529 \pm 0.019	19.159 \pm 0.025	18.976 \pm 0.028	19.008 \pm 0.042	18.791 \pm 0.054	0.10	2.064
201.....	ZK-56				01 33 45.753	30 34 48.69	17.698 \pm 0.007	18.482 \pm 0.011	18.266 \pm 0.011	17.955 \pm 0.010	17.283 \pm 0.007	0.10	1.290
202.....	ZK-57				01 33 46.572	30 34 42.43	19.754 \pm 0.032	19.729 \pm 0.034	19.005 \pm 0.029	18.525 \pm 0.029	17.968 \pm 0.030	0.10	2.838
203.....	ZK-58				01 33 46.676	30 36 12.34	19.770 \pm 0.050	20.230 \pm 0.080	20.007 \pm 0.097	20.036 \pm 0.153	19.269 \pm 0.126	0.10	2.838
204.....	ZK-59				01 33 46.790	30 35 59.27	20.428 \pm 0.029	20.539 \pm 0.031	19.985 \pm 0.029	19.549 \pm 0.029	19.056 \pm 0.024	0.10	1.548
205.....	ZK-60				01 33 48.590	30 37 05.48	18.300 \pm 0.012	18.844 \pm 0.018	18.356 \pm 0.018	17.959 \pm 0.017	17.394 \pm 0.015	0.10	2.580
206.....	ZK-61				01 33 48.620	30 35 23.60	19.902 \pm 0.027	19.800 \pm 0.026	19.218 \pm 0.028	18.983 \pm 0.033	18.633 \pm 0.036	0.10	2.322
207.....	ZK-62				01 33 49.581	30 28 42.55	20.313 \pm 0.031	20.375 \pm 0.034	19.996 \pm 0.036	19.780 \pm 0.037	19.477 \pm 0.042	0.10	2.064
208.....	ZK-63				01 33 51.018	30 35 24.78	20.738 \pm 0.032	20.782 \pm 0.040	20.205 \pm 0.041	19.935 \pm 0.062	19.488 \pm 0.064	0.10	1.806
209.....	ZK-64				01 33 53.249	30 35 26.03	16.243 \pm 0.004	17.084 \pm 0.006	16.992 \pm 0.006	17.046 \pm 0.008	17.082 \pm 0.011	0.10	1.806
210.....	ZK-65				01 33 53.426	30 31 27.40	19.710 \pm 0.026	19.882 \pm 0.026	19.632 \pm 0.032	19.519 \pm 0.044	19.172 \pm 0.052	0.10	1.806
211.....	ZK-67				01 33 53.833	30 32 13.55	20.506 \pm 0.036	20.433 \pm 0.031	20.052 \pm 0.034	19.784 \pm 0.041	18.900 \pm 0.034	0.10	1.806
212.....	ZK-68				01 33 54.192	30 36 07.06	20.438 \pm 0.030	20.460 \pm 0.031	20.160 \pm 0.040	19.994 \pm 0.057	19.689 \pm 0.074	0.10	1.806
213.....	ZK-69				01 33 54.517	30 32 24.06	19.617 \pm 0.036	19.844 \pm 0.048	19.336 \pm 0.058	19.156 \pm 0.062	18.777 \pm 0.064	0.10	1.806
214.....	ZK-70				01 33 57.965	30 32 22.02	20.595 \pm 0.045	20.415 \pm 0.031	19.630 \pm 0.025	18.804 \pm 0.020	18.007 \pm 0.013	0.10	1.290
215.....	ZK-71				01 33 59.537	30 32 00.41	19.451 \pm 0.021	19.914 \pm 0.027	19.395 \pm 0.028	18.713 \pm 0.023	17.979 \pm 0.020	0.10	2.838
216.....	ZK-73				01 33 59.825	30 32 00.25	19.862 \pm 0.018	20.211 \pm 0.023	19.666 \pm 0.023	19.162 \pm 0.020	18.569 \pm 0.018	0.10	1.806
217.....	ZK-74				01 34 01.858	30 34 06.34	20.148 \pm 0.055	20.183 \pm 0.048	19.644 \pm 0.050	19.360 \pm 0.060	18.768 \pm 0.062	0.10	2.838
218.....	ZK-75				01 34 02.006	30 34 22.77	19.988 \pm 0.032	20.305 \pm 0.042	19.706 \pm 0.040	19.078 \pm 0.028	18.277 \pm 0.021	0.10	2.064
219.....	ZK-76				01 34 02.372	30 32 37.91	19.843 \pm 0.028	19.750 \pm 0.028	18.876 \pm 0.022	18.325 \pm 0.019	17.714 \pm 0.018	0.10	3.096
220.....	ZK-77				01 34 03.297	30 27 56.11	17.955 \pm 0.006	18.241 \pm 0.008	17.937 \pm 0.008	17.794 \pm 0.008	17.553 \pm 0.008	0.10	2.322
221.....	ZK-78				01 34 03.556	30 33 41.65	19.630 \pm 0.020	19.833 \pm 0.023	19.527 \pm 0.028	19.506 \pm 0.041	19.466 \pm 0.063	0.10	2.064
222.....	ZK-79				01 34 04.651	30 27 21.63	20.092 \pm 0.022	20.445 \pm 0.027	20.023 \pm 0.029	19.775 \pm 0.034	19.283 \pm 0.031	0.10	2.322
223.....	ZK-80				01 34 04.974	30 28 20.22	20.731 \pm 0.034	20.753 \pm 0.032	20.257 \pm 0.039	19.837 \pm 0.033	19.505 \pm 0.038	0.10	2.322
224.....	ZK-81				01 34 06.736	30 28 04.38	19.491 \pm 0.013	19.837 \pm 0.020	19.503 \pm 0.022	19.179 \pm 0.023	18.864 \pm 0.022	0.10	2.322

TABLE 1
CONTINUED.

ID	ID	ID	ID	ID	R.A. (J2000.0)	Decl. (J2000.0)	U (mag)	B (mag)	V (mag)	R_C (mag)	I_C (mag)	$E(B - V)$ (mag)	r_{ap} ($''$)
225.....	ZK-82				01 34 06.750	30 34 05.20	.....	20.864 \pm 0.054	20.036 \pm 0.044	19.278 \pm 0.029	18.355 \pm 0.017	0.10	1.806
226.....	ZK-83				01 34 07.277	30 33 46.31	20.171 \pm 0.034	20.105 \pm 0.033	19.472 \pm 0.034	19.104 \pm 0.036	18.675 \pm 0.046	0.10	3.354
227.....	ZK-84				01 34 09.691	30 25 05.00	19.821 \pm 0.020	20.094 \pm 0.023	19.907 \pm 0.028	19.703 \pm 0.030	19.589 \pm 0.039	0.10	2.580
228.....	ZK-85				01 34 10.933	30 28 33.04	19.109 \pm 0.013	19.553 \pm 0.018	19.334 \pm 0.023	19.341 \pm 0.033	19.356 \pm 0.043	0.10	3.096
229.....	ZK-86				01 34 12.933	30 28 46.25	18.094 \pm 0.007	18.432 \pm 0.009	18.121 \pm 0.009	17.939 \pm 0.009	17.683 \pm 0.009	0.10	2.322
230.....	ZK-87				01 34 13.533	30 28 44.05	20.513 \pm 0.030	20.529 \pm 0.031	19.916 \pm 0.032	19.479 \pm 0.031	18.814 \pm 0.028	0.10	2.580
231.....	ZK-88				01 34 17.779	30 27 08.90	20.888 \pm 0.028	20.992 \pm 0.032	20.601 \pm 0.034	20.229 \pm 0.032	19.953 \pm 0.038	0.10	1.806
232.....	ZK-89				01 34 18.703	30 27 19.81	20.402 \pm 0.022	20.614 \pm 0.026	20.088 \pm 0.025	19.680 \pm 0.023	19.256 \pm 0.022	0.10	2.064
233.....	ZK-90				01 35 02.263	31 14 21.45	.....	22.273 \pm 0.332	20.889 \pm 0.144	20.481 \pm 0.110	.....	0.10	2.580
234.....	ZK-91				01 35 04.849	31 11 57.91	22.060 \pm 0.075	21.981 \pm 0.093	21.753 \pm 0.134	21.539 \pm 0.124	21.406 \pm 0.160	0.10	2.580

TABLE 2
COMPARISON BETWEEN THIS STUDY AND PREVIOUS STUDIES OF V PHOTOMETRY FOR M33 STAR CLUSTERS CONSIDERED HERE

ID ^a	ID ^b	V^c (mag)	V^d (mag)	V^e (mag)	ΔV^f (mag)	ΔV^g (mag)	r_{ap}^h ($''$)
PL197		17.652±0.003		20.384±0.056	2.732		1.032
SR5	25-1-003	19.768	20.41	20.951±0.087	1.183	0.541	1.290
SR16	33-5-019	20.352	21.16	21.663±0.113	1.311	0.503	2.580
SR45		20.063		21.159±0.060	1.095		1.548
SR50		19.530		20.670±0.174	1.140		2.580
SR58		19.514		20.601±0.047	1.087		1.548
SR116		18.405		19.566±0.046	1.161		1.548
SR118		18.151		19.533±0.066	1.382		1.290

^aThe star cluster names following the naming convention of Park & Lee (2007) or San Roman et al. (2009).

^bThe star cluster names following the naming convention of Zloczewski & Kaluzny (2009).

^cThe photometry obtained by Park & Lee (2007) or by San Roman et al. (2009).

^dThe photometry obtained by Zloczewski & Kaluzny (2009).

^eThe photometry obtained in this paper.

^fThe magnitude difference between this study and Park & Lee (2007) or San Roman et al. (2009) (this study minus Park & Lee 2007 or San Roman et al. 2009).

^gThe magnitude difference between this study and Zloczewski & Kaluzny (2009) (this study minus Zloczewski & Kaluzny 2009).

^hThe aperture radius of photometry adopted in this paper.

TABLE 3
UBVRI PHOTOMETRY OF 277 M33 STAR CLUSTERS IN MA (2012)

ID	ID	ID	ID	R.A. (J2000.0)	Decl. (J2000.0)	<i>U</i> (mag)	<i>B</i> (mag)	<i>V</i> (mag)	<i>R_C</i> (mag)	<i>I_C</i> (mag)	<i>E(B - V)</i> (mag)	<i>r_{ap}</i> ($''$)
235.....	SM3	PL33		01 32 34.430	30 37 42.61	21.184 ± 0.053	21.087 ± 0.064	20.419 ± 0.042	20.107 ± 0.041	19.807 ± 0.037	0.05	2.322
236.....	SM6	PL105		01 32 38.977	30 39 18.03	20.223 ± 0.035	20.276 ± 0.047	19.767 ± 0.042	19.444 ± 0.038	18.970 ± 0.032	0.10	3.096
237.....	SM9			01 32 42.944	30 35 38.67	17.912 ± 0.007	18.016 ± 0.009	17.609 ± 0.008	17.331 ± 0.007	16.929 ± 0.006	0.10	3.612
238.....	SM10	PL106		01 32 44.302	30 40 12.33	19.741 ± 0.028	19.597 ± 0.025	18.780 ± 0.017	18.294 ± 0.016	17.676 ± 0.011	0.10	3.096
239.....	SM15			01 32 51.818	30 29 36.52	18.937 ± 0.015	18.985 ± 0.020	18.512 ± 0.015	18.178 ± 0.013	17.724 ± 0.012	0.10	3.354
240.....	SM16			01 32 52.644	30 14 30.97	19.114 ± 0.010	19.191 ± 0.012	18.842 ± 0.010	18.640 ± 0.011	18.304 ± 0.011	0.10	2.580
241.....	SM23			01 32 55.473	30 29 22.34	19.436 ± 0.017	19.765 ± 0.026	19.545 ± 0.025	19.280 ± 0.024	18.666 ± 0.018	0.10	2.064
242.....	SM26			01 32 56.323	30 14 58.94	18.171 ± 0.007	18.125 ± 0.007	17.752 ± 0.007	17.536 ± 0.007	17.215 ± 0.009	0.10	4.128
243.....	SM28			01 32 57.600	30 55 42.72	20.833 ± 0.035	20.597 ± 0.032	19.840 ± 0.025	19.351 ± 0.021	18.948 ± 0.021	0.10	2.838
244.....	SM29			01 32 58.626	30 47 57.23	19.454 ± 0.013	19.528 ± 0.015	19.273 ± 0.016	19.222 ± 0.019	19.032 ± 0.021	0.10	2.580
245.....	SM31		SR3	01 33 00.380	30 26 47.95	20.538 ± 0.042	20.619 ± 0.052	20.070 ± 0.037	19.696 ± 0.031	19.241 ± 0.024	0.08	2.322
246.....	SM32			01 33 00.542	30 45 17.60	18.829 ± 0.010	19.070 ± 0.012	18.787 ± 0.012	18.668 ± 0.014	18.519 ± 0.017	0.10	1.806
247.....	SM34	PL107		01 33 01.124	30 35 45.23	20.661 ± 0.037	20.895 ± 0.052	20.356 ± 0.046	19.783 ± 0.036	19.220 ± 0.027	0.05	1.806
248.....	SM35	PL108		01 33 02.366	30 34 44.42	17.657 ± 0.006	18.675 ± 0.012	18.592 ± 0.016	18.341 ± 0.016	18.534 ± 0.021	0.15	1.806
249.....	SM40	PL109	SR11	01 33 08.111	30 28 00.26	19.872 ± 0.033	19.815 ± 0.036	19.027 ± 0.025	18.674 ± 0.023	18.244 ± 0.019	0.12	3.096
250.....	SM41			01 33 09.818	30 12 50.70	19.058 ± 0.010	19.095 ± 0.012	18.810 ± 0.012	18.668 ± 0.014	18.462 ± 0.017	0.10	3.096
251.....	SM42	PL110		01 33 10.114	30 29 56.97	18.324 ± 0.030	18.689 ± 0.027	18.557 ± 0.026	18.408 ± 0.033	18.175 ± 0.031	0.15	3.612
252.....	SM44			01 33 13.804	30 29 03.60	20.989 ± 0.044	20.823 ± 0.046	20.180 ± 0.038	19.789 ± 0.034	19.408 ± 0.037	0.10	1.290
253.....	SM45	PL111		01 33 13.874	30 29 05.30	21.442 ± 0.055	21.055 ± 0.046	20.170 ± 0.032	19.610 ± 0.024	19.120 ± 0.023	0.20	1.290
254.....	SM46			01 33 13.887	30 28 24.33	23.105 ± 0.190	23.243 ± 0.222	22.556 ± 0.163	21.946 ± 0.118	22.152 ± 0.159	0.10	1.032
255.....	SM47	PL112		01 33 13.904	30 29 44.79	17.549 ± 0.014	18.519 ± 0.020	18.303 ± 0.020	18.216 ± 0.021	18.482 ± 0.029	0.15	2.580
256.....	SM49	PL113	SR22	01 33 14.330	30 28 22.90	19.362 ± 0.021	19.129 ± 0.020	18.323 ± 0.013	17.752 ± 0.010	17.258 ± 0.008	0.08	3.096
257.....	SM52	PL114		01 33 15.179	30 32 53.06	20.467 ± 0.041	20.479 ± 0.044	19.778 ± 0.035	19.410 ± 0.031	19.018 ± 0.029	0.05	2.322
258.....	SM53		SR25	01 33 16.089	30 20 56.69	18.609 ± 0.007	18.657 ± 0.009	18.285 ± 0.010	18.055 ± 0.010	17.645 ± 0.010	0.08	3.096
259.....	SM54	PL115		01 33 16.631	30 34 35.82	20.327 ± 0.031	20.227 ± 0.033	19.683 ± 0.026	19.208 ± 0.025	18.812 ± 0.023	0.10	2.064
260.....	SM61		SR29	01 33 21.169	30 37 55.61	20.024 ± 0.030	19.868 ± 0.034	19.274 ± 0.030	18.946 ± 0.030	18.346 ± 0.027	0.08	2.838
261.....	SM63		SR35	01 33 21.667	30 37 48.52	20.059 ± 0.025	20.092 ± 0.029	19.569 ± 0.030	19.245 ± 0.031	18.945 ± 0.031	0.12	2.064
262.....	SM65			01 33 22.146	30 45 34.33	19.846 ± 0.024	19.674 ± 0.022	19.034 ± 0.019	18.596 ± 0.020	18.083 ± 0.020	0.10	3.354
263.....	SM66	PL34	SR36	01 33 22.110	30 40 28.34	20.577 ± 0.035	20.479 ± 0.042	19.249 ± 0.026	18.307 ± 0.014	17.348 ± 0.012	0.10	1.548
264.....	SM67			01 33 22.167	30 40 25.97	18.273 ± 0.008	18.678 ± 0.011	18.473 ± 0.012	18.421 ± 0.013	18.186 ± 0.015	0.10	1.806
265.....	SM68	PL35		01 33 22.322	30 40 59.37	18.834 ± 0.017	18.962 ± 0.018	18.630 ± 0.022	18.498 ± 0.026	18.006 ± 0.026	0.10	3.096
266.....	SM70			01 33 23.112	30 33 00.59	17.559 ± 0.006	17.893 ± 0.008	17.588 ± 0.008	17.410 ± 0.008	17.090 ± 0.008	0.10	2.322
267.....	SM71		SR41	01 33 23.109	30 32 22.94	19.768 ± 0.027	19.769 ± 0.031	19.121 ± 0.021	18.725 ± 0.018	18.300 ± 0.018	0.12	2.580
268.....	SM74	PL37	SR42	01 33 23.905	30 40 26.05	19.858 ± 0.029	20.070 ± 0.037	19.603 ± 0.039	19.414 ± 0.051	18.899 ± 0.052	0.08	2.580
269.....	SM75	PL116		01 33 24.616	30 32 56.19	20.682 ± 0.041	20.538 ± 0.043	19.917 ± 0.034	19.551 ± 0.030	18.916 ± 0.027	0.10	2.064
270.....	SM76	PL38		01 33 24.856	30 33 55.07	19.825 ± 0.023	20.280 ± 0.034	20.039 ± 0.037	19.970 ± 0.048	19.501 ± 0.041	0.10	2.064
271.....	SM77	PL39		01 33 25.622	30 29 56.88	19.432 ± 0.018	19.203 ± 0.018	18.356 ± 0.011	17.828 ± 0.009	17.282 ± 0.007	0.10	2.322
272.....	SM78			01 33 25.594	30 45 30.67	19.065 ± 0.015	19.222 ± 0.018	18.882 ± 0.021	18.655 ± 0.026	18.384 ± 0.030	0.10	3.096
273.....	SM80	PL40		01 33 25.999	30 36 24.38	18.128 ± 0.012	18.197 ± 0.012	17.811 ± 0.011	17.596 ± 0.013	17.278 ± 0.014	0.10	2.064
274.....	SM81	PL41		01 33 26.371	30 41 06.89	19.671 ± 0.024	19.655 ± 0.022	19.085 ± 0.021	18.670 ± 0.018	18.137 ± 0.015	0.20	2.064
275.....	SM83	PL42		01 33 26.493	30 41 11.61	20.234 ± 0.043	20.186 ± 0.037	19.696 ± 0.034	19.486 ± 0.036	19.032 ± 0.034	0.20	2.064
276.....	SM85	PL43		01 33 26.765	30 33 21.43	17.387 ± 0.006	17.836 ± 0.009	17.574 ± 0.010	17.402 ± 0.011	17.109 ± 0.012	0.10	2.064
277.....	SM86	PL44		01 33 26.943	30 34 52.54	18.774 ± 0.012	19.074 ± 0.018	18.648 ± 0.018	18.285 ± 0.020	17.687 ± 0.018	0.10	2.838
278.....	SM87	PL45		01 33 27.370	30 41 59.89	19.149 ± 0.025	19.197 ± 0.024	18.420 ± 0.021	17.789 ± 0.018	17.247 ± 0.017	0.20	3.612
279.....	SM88	PL46		01 33 27.967	30 37 28.41	19.292 ± 0.023	19.707 ± 0.032	19.463 ± 0.034	19.194 ± 0.029	18.971 ± 0.032	0.15	1.806
280.....	SM90	PL117		01 33 28.009	30 21 06.19	20.020 ± 0.017	20.036 ± 0.018	19.721 ± 0.007	19.373 ± 0.018	19.259 ± 0.025	0.15	1.806
281.....	SM91			01 33 28.111	30 58 30.73	18.940 ± 0.022	18.657 ± 0.016	17.788 ± 0.011	17.236 ± 0.008	16.692 ± 0.008	0.10	4.128
282.....	SM93	PL47		01 33 28.414	30 36 23.08	17.922 ± 0.014	17.919 ± 0.014	17.492 ± 0.014	17.244 ± 0.017	16.784 ± 0.016	0.10	3.612
283.....	SM94	PL48		01 33 28.680	30 36 37.58	17.922 ± 0.010	18.052 ± 0.011	17.711 ± 0.011	17.500 ± 0.012	17.198 ± 0.013	0.10	2.580
284.....	SM95	PL49		01 33 28.719	30 41 35.13	18.092 ± 0.011	18.042 ± 0.010	17.286 ± 0.008	16.846 ± 0.008	16.379 ± 0.007	0.20	3.096
285.....	SM98	PL50	SR55	01 33 29.485	30 30 02.18	18.044 ± 0.009	18.387 ± 0.012	18.120 ± 0.012	17.975 ± 0.015	17.689 ± 0.016	0.09	2.580
286.....	SM100	PL118		01 33 30.070	30 49 29.18	21.212 ± 0.038	21.242 ± 0.041	20.846 ± 0.046	20.640 ± 0.062	20.343 ± 0.067	0.10	1.806
287.....	SM101			01 33 30.695	30 26 32.00	19.138 ± 0.023	18.832 ± 0.021	18.010 ± 0.013	17.518 ± 0.011	16.917 ± 0.009	0.10	3.612
288.....	SM102	PL119		01 33 30.698	30 22 21.55	18.988 ± 0.026	18.741 ± 0.022	18.036 ± 0.014	17.644 ± 0.012	17.206 ± 0.010	0.10	3.870
289.....	SM103	PL120		01 33 30.894	30 49 11.97	19.216 ± 0.016	19.034 ± 0.015	18.478 ± 0.014	18.142 ± 0.017	17.722 ± 0.015	0.10	3.870
290.....	SM104	PL51		01 33 30.924	30 37 12.90	18.492 ± 0.011	18.711 ± 0.014	18.376 ± 0.016	18.111 ± 0.018	17.681 ± 0.021	0.15	2.838
291.....	SM105	PL52		01 33 30.995	30 36 52.62	17.983 ± 0.010	18.380 ± 0.015	18.040 ± 0.016	17.752 ± 0.016	17.125 ± 0.014	0.10	2.580

TABLE 3
(CONTINUED.)

ID	ID	ID	ID	R.A. (J2000.0)	Decl. (J2000.0)	U (mag)	B (mag)	V (mag)	R_C (mag)	I_C (mag)	$E(B - V)$ (mag)	r_{ap} ($''$)
292.....	SM106	PL121		01 33 31.103	30 33 45.55	19.034 \pm 0.017	18.988 \pm 0.020	18.650 \pm 0.021	18.387 \pm 0.024	18.135 \pm 0.027	0.15	2.580
293.....	SM109	PL122		01 33 31.238	30 50 07.22	19.799 \pm 0.025	19.766 \pm 0.025	19.372 \pm 0.029	19.083 \pm 0.030	18.775 \pm 0.033	0.10	3.354
294.....	SM110	PL53	SR61	01 33 31.406	30 40 20.37	18.750 \pm 0.015	18.581 \pm 0.015	17.979 \pm 0.013	17.619 \pm 0.015	17.241 \pm 0.017	0.18	3.354
295.....	SM113	PL123		01 33 32.019	30 33 21.81	17.160 \pm 0.006	17.610 \pm 0.008	17.309 \pm 0.008	17.099 \pm 0.008	16.750 \pm 0.009	0.15	2.322
296.....	SM114	PL54	SR63	01 33 32.165	30 40 31.82	18.497 \pm 0.010	19.013 \pm 0.014	18.762 \pm 0.016	18.690 \pm 0.020	18.445 \pm 0.022	0.14	2.322
297.....	SM115			01 33 32.160	30 56 05.04	20.142 \pm 0.027	20.092 \pm 0.026	19.598 \pm 0.026	19.340 \pm 0.027	19.087 \pm 0.031	0.10	3.096
298.....	SM116			01 33 32.345	30 38 28.24	22.819 \pm 0.252	23.218 \pm 0.476	21.174 \pm 0.116	20.330 \pm 0.085	19.483 \pm 0.071	0.10	1.548
299.....	SM117	PL124	SR65	01 33 32.433	30 38 24.53	19.530 \pm 0.024	19.385 \pm 0.022	18.755 \pm 0.017	18.437 \pm 0.020	18.014 \pm 0.025	0.15	2.322
300.....	SM118	PL125	SR66	01 33 32.591	30 39 24.53	20.512 \pm 0.036	20.632 \pm 0.042	20.077 \pm 0.039	19.662 \pm 0.038	19.075 \pm 0.029	0.09	1.290
301.....	SM119	PL55		01 33 32.719	30 36 55.27	17.407 \pm 0.007	18.447 \pm 0.016	18.232 \pm 0.017	17.774 \pm 0.015	18.029 \pm 0.028	0.10	2.580
302.....	SM120	PL126	SR67	01 33 32.765	30 31 45.13	20.888 \pm 0.070	21.103 \pm 0.084	20.262 \pm 0.050	19.754 \pm 0.045	18.969 \pm 0.030	0.16	1.806
303.....	SM121	PL127		01 33 32.968	30 49 41.81	19.359 \pm 0.019	19.160 \pm 0.018	18.551 \pm 0.018	18.132 \pm 0.016	17.645 \pm 0.015	0.15	4.128
304.....	SM122	PL128		01 33 33.273	30 48 30.57	19.095 \pm 0.016	18.980 \pm 0.016	18.462 \pm 0.015	18.151 \pm 0.016	17.678 \pm 0.015	0.15	3.354
305.....	SM123	PL56		01 33 33.572	30 36 35.79	19.289 \pm 0.033	19.494 \pm 0.036	19.244 \pm 0.039	19.197 \pm 0.053	18.868 \pm 0.062	0.10	2.580
306.....	SM124	PL129	SR72	01 33 33.722	30 40 02.98	19.459 \pm 0.019	19.305 \pm 0.020	18.812 \pm 0.022	18.512 \pm 0.023	18.079 \pm 0.027	0.14	1.806
307.....	SM126	PL57		01 33 34.377	30 42 01.37	18.674 \pm 0.028	19.036 \pm 0.022	18.637 \pm 0.019	18.300 \pm 0.026	17.931 \pm 0.023	0.20	2.580
308.....	SM127	PL130		01 33 34.674	30 48 21.35	19.549 \pm 0.022	19.791 \pm 0.029	19.172 \pm 0.025	18.821 \pm 0.026	18.196 \pm 0.023	0.15	3.096
309.....	SM130	PL131		01 33 35.111	30 49 00.17	19.988 \pm 0.029	19.447 \pm 0.019	18.373 \pm 0.013	17.692 \pm 0.010	17.099 \pm 0.009	0.20	2.838
310.....	SM131	PL132		01 33 35.277	30 33 11.67	19.579 \pm 0.026	19.616 \pm 0.031	19.125 \pm 0.029	18.728 \pm 0.027	18.389 \pm 0.041	0.10	2.322
311.....	SM132	PL133	SR74	01 33 35.617	30 38 36.77	16.998 \pm 0.007	17.640 \pm 0.009	17.511 \pm 0.008	17.550 \pm 0.011	17.520 \pm 0.013	0.10	1.548
312.....	SM134	PL134		01 33 36.186	30 47 55.22	18.184 \pm 0.010	18.429 \pm 0.012	18.067 \pm 0.012	17.831 \pm 0.013	17.475 \pm 0.014	0.20	2.064
313.....	SM136		SR78	01 33 36.725	30 27 08.19	19.054 \pm 0.021	19.051 \pm 0.020	18.560 \pm 0.016	18.188 \pm 0.014	17.690 \pm 0.011	0.12	2.580
314.....	SM138	PL135		01 33 36.784	30 49 17.69	18.904 \pm 0.013	19.168 \pm 0.016	18.651 \pm 0.015	18.293 \pm 0.015	17.903 \pm 0.014	0.20	2.838
315.....	SM140			01 33 37.246	30 34 14.03	17.118 \pm 0.005	17.416 \pm 0.006	17.122 \pm 0.006	16.936 \pm 0.007	16.679 \pm 0.008	0.10	2.064
316.....	SM141		SR80	01 33 37.574	30 28 04.68	17.788 \pm 0.007	18.107 \pm 0.009	17.729 \pm 0.008	17.484 \pm 0.008	17.074 \pm 0.008	0.08	2.580
317.....	SM142	PL58		01 33 37.799	30 50 32.39	20.312 \pm 0.057	20.373 \pm 0.035	19.495 \pm 0.026	18.878 \pm 0.025	18.336 \pm 0.021	0.25	2.580
318.....	SM143		SR81	01 33 37.987	30 38 02.22	18.405 \pm 0.014	18.328 \pm 0.013	17.496 \pm 0.009	16.971 \pm 0.009	16.395 \pm 0.009	0.08	2.838
319.....	SM144	PL136		01 33 38.049	30 33 05.49	17.449 \pm 0.005	17.852 \pm 0.008	17.573 \pm 0.008	17.448 \pm 0.009	17.160 \pm 0.012	0.10	2.322
320.....	SM145	PL137		01 33 38.083	30 33 17.69	19.261 \pm 0.018	19.166 \pm 0.018	18.548 \pm 0.015	18.242 \pm 0.015	17.915 \pm 0.018	0.10	2.322
321.....	SM146	PL59		01 33 38.130	30 42 22.93	18.760 \pm 0.015	19.100 \pm 0.017	18.733 \pm 0.020	18.461 \pm 0.026	18.028 \pm 0.029	0.20	3.096
322.....	SM149			01 33 39.435	30 55 59.81	19.696 \pm 0.019	19.679 \pm 0.021	19.037 \pm 0.017	18.574 \pm 0.017	18.095 \pm 0.016	0.10	3.096
323.....	SM151	PL138		01 33 39.486	30 48 48.26	19.153 \pm 0.012	19.101 \pm 0.014	18.719 \pm 0.015	18.558 \pm 0.018	18.301 \pm 0.021	0.10	2.322
324.....	SM152		SR86	01 33 39.699	30 31 09.18	16.122 \pm 0.004	16.652 \pm 0.005	16.462 \pm 0.005	16.387 \pm 0.006	16.186 \pm 0.006	0.05	3.354
325.....	SM153	PL139		01 33 39.712	30 32 29.56	20.419 \pm 0.078	20.537 \pm 0.067	20.047 \pm 0.051	19.653 \pm 0.044	18.814 \pm 0.032	0.10	1.290
326.....	SM154		SR87	01 33 39.933	30 38 26.22	15.738 \pm 0.004	16.316 \pm 0.004	15.993 \pm 0.004	15.714 \pm 0.004	15.209 \pm 0.004	0.05	2.322
327.....	SM155	PL140		01 33 40.088	30 21 37.13	20.530 \pm 0.072	20.421 \pm 0.060	20.033 \pm 0.051	19.718 \pm 0.043	19.386 \pm 0.042	0.10	1.806
328.....	SM156	PL60		01 33 40.370	30 43 58.04	16.743 \pm 0.004	17.268 \pm 0.005	17.036 \pm 0.006	16.922 \pm 0.007	16.649 \pm 0.008	0.20	3.096
329.....	SM159		SR89	01 33 41.190	30 29 53.93	19.762 \pm 0.028	19.855 \pm 0.034	19.244 \pm 0.027	18.852 \pm 0.027	18.393 \pm 0.022	0.12	2.322
330.....	SM161	PL61		01 33 41.535	30 42 44.93	18.969 \pm 0.016	19.144 \pm 0.019	18.757 \pm 0.018	18.484 \pm 0.019	17.985 \pm 0.020	0.20	2.322
331.....	SM162		SR91	01 33 41.550	30 30 24.23	18.892 \pm 0.017	19.445 \pm 0.029	19.216 \pm 0.033	18.820 \pm 0.034	18.186 \pm 0.028	0.05	3.096
332.....	SM163		SR92	01 33 41.594	30 28 09.38	19.314 \pm 0.022	19.889 \pm 0.033	19.891 \pm 0.043	19.900 \pm 0.058	20.002 \pm 0.083	0.05	2.064
333.....	SM165	PL141		01 33 41.591	30 48 08.65	19.411 \pm 0.025	19.411 \pm 0.023	19.028 \pm 0.027	18.702 \pm 0.028	18.354 \pm 0.030	0.10	3.354
334.....	SM166	PL142		01 33 41.908	30 49 20.18	21.438 \pm 0.078	20.996 \pm 0.051	19.970 \pm 0.036	19.237 \pm 0.026	18.399 \pm 0.018	0.20	2.580
335.....	SM168	PL143		01 33 42.706	30 43 49.65	18.220 \pm 0.014	18.666 \pm 0.018	18.224 \pm 0.021	17.875 \pm 0.022	17.461 \pm 0.024	0.10	2.580
336.....	SM171	PL144		01 33 43.742	30 40 56.61	17.938 \pm 0.011	18.784 \pm 0.023	18.459 \pm 0.030	17.892 \pm 0.024	17.849 \pm 0.033	0.15	2.322
337.....	SM172	PL145		01 33 43.864	30 32 10.46	17.035 \pm 0.005	17.520 \pm 0.007	17.347 \pm 0.008	17.256 \pm 0.009	17.107 \pm 0.010	0.20	2.322
338.....	SM174		SR103	01 33 44.055	30 30 00.93	18.338 \pm 0.010	18.633 \pm 0.014	18.283 \pm 0.014	18.104 \pm 0.013	17.717 \pm 0.015	0.08	2.580
339.....	SM176		SR106	01 33 44.509	30 37 52.80	17.501 \pm 0.007	17.762 \pm 0.008	17.487 \pm 0.009	17.403 \pm 0.013	17.183 \pm 0.018	0.12	2.064
340.....	SM178	PL146		01 33 45.043	30 47 46.83	17.210 \pm 0.005	17.081 \pm 0.005	16.298 \pm 0.004	15.823 \pm 0.004	15.311 \pm 0.003	0.10	3.354
341.....	SM179	PL147		01 33 45.130	30 49 09.39	19.933 \pm 0.022	20.018 \pm 0.028	19.764 \pm 0.033	19.612 \pm 0.041	19.323 \pm 0.051	0.10	1.806
342.....	SM180			01 33 45.512	30 30 40.71	19.752 \pm 0.027	19.701 \pm 0.028	19.060 \pm 0.022	18.674 \pm 0.020	17.932 \pm 0.014	0.10	2.580
343.....	SM181	PL148		01 33 45.767	30 27 17.47	18.959 \pm 0.016	18.979 \pm 0.017	18.573 \pm 0.016	18.330 \pm 0.016	17.978 \pm 0.015	0.10	2.580
344.....	SM182	PL149		01 33 46.271	30 47 51.21	19.858 \pm 0.025	19.707 \pm 0.023	19.022 \pm 0.021	18.488 \pm 0.017	17.990 \pm 0.015	0.10	2.838
345.....	SM184	PL150		01 33 46.961	30 46 36.32	19.508 \pm 0.025	19.618 \pm 0.028	18.759 \pm 0.017	18.275 \pm 0.016	17.677 \pm 0.012	0.20	2.580
346.....	SM186	PL151		01 33 48.456	30 45 38.72	19.478 \pm 0.020	19.336 \pm 0.020	18.625 \pm 0.018	18.236 \pm 0.018	17.741 \pm 0.015	0.10	2.580
347.....	SM187	PL152		01 33 48.639	30 47 42.62	20.636 \pm 0.028	20.687 \pm 0.031	20.261 \pm 0.032	19.966 \pm 0.039	19.332 \pm 0.035	0.10	1.548

TABLE 3
(CONTINUED.)

ID	ID	ID	ID	R.A. (J2000.0)	Decl. (J2000.0)	U (mag)	B (mag)	V (mag)	R_C (mag)	I_C (mag)	$E(B - V)$ (mag)	r_{ap} ($''$)
348.....	SM189	PL153		01 33 49.135	30 49 01.61	20.587 ± 0.039	20.582 ± 0.040	19.922 ± 0.035	19.511 ± 0.036	19.024 ± 0.036	0.10	2.322
349.....	SM190	PL154		01 33 49.348	30 47 12.69	18.197 ± 0.008	18.424 ± 0.011	18.132 ± 0.011	17.965 ± 0.013	17.650 ± 0.016	0.20	2.580
350.....	SM191	PL155	SR122	01 33 49.621	30 34 25.88	18.917 ± 0.014	18.800 ± 0.014	18.316 ± 0.015	18.037 ± 0.015	17.654 ± 0.015	0.12	2.322
351.....	SM192	PL156	SR124	01 33 50.195	30 34 19.00	19.841 ± 0.044	19.831 ± 0.036	19.131 ± 0.032	18.765 ± 0.034	18.139 ± 0.033	0.12	2.838
352.....	SM193	PL157		01 33 50.285	30 31 11.05	21.321 ± 0.086	21.656 ± 0.106	20.775 ± 0.065	20.271 ± 0.067	19.780 ± 0.071	0.10	2.064
353.....	SM194			01 33 50.704	30 58 50.36	17.295 ± 0.005	17.676 ± 0.007	17.488 ± 0.008	17.374 ± 0.008	17.169 ± 0.010	0.10	3.870
354.....	SM195	PL158		01 33 50.729	30 44 55.75	22.958 ± 0.584	21.987 ± 0.252	20.732 ± 0.108	19.842 ± 0.064	18.925 ± 0.046	0.15	1.806
355.....	SM196	PL159		01 33 50.839	30 29 00.03	21.590 ± 0.067	21.499 ± 0.066	20.874 ± 0.059	20.530 ± 0.062	20.242 ± 0.066	0.10	1.806
356.....	SM197	PL62		01 33 50.838	30 38 34.64	15.544 ± 0.002	16.405 ± 0.004	16.384 ± 0.005	16.515 ± 0.008	16.604 ± 0.014	0.15	2.064
357.....	SM198	PL63		01 33 50.917	30 38 55.54	16.373 ± 0.008	17.087 ± 0.010	16.779 ± 0.009	16.383 ± 0.008	15.654 ± 0.006	0.15	2.064
358.....	SM199	PL160		01 33 50.920	30 31 44.88	18.074 ± 0.014	18.320 ± 0.017	17.891 ± 0.018	17.730 ± 0.020	17.543 ± 0.027	0.10	3.354
359.....	SM201	PL161	SR126	01 33 51.239	30 34 13.31	18.755 ± 0.015	18.877 ± 0.017	18.494 ± 0.019	18.302 ± 0.022	17.913 ± 0.026	0.09	2.322
360.....	SM204	PL162		01 33 51.778	30 31 47.35	18.993 ± 0.019	19.402 ± 0.025	19.107 ± 0.029	19.015 ± 0.038	18.903 ± 0.056	0.20	2.580
361.....	SM206	PL163		01 33 52.137	30 29 03.83	18.297 ± 0.010	18.126 ± 0.009	17.290 ± 0.007	16.773 ± 0.006	16.277 ± 0.006	0.10	3.354
362.....	SM207	PL164	SR128	01 33 52.382	30 35 00.88	19.445 ± 0.018	19.664 ± 0.022	19.307 ± 0.023	19.081 ± 0.029	18.776 ± 0.038	0.12	1.806
363.....	SM208	PL165	SR129	01 33 52.395	30 34 21.27	19.711 ± 0.025	19.482 ± 0.022	18.882 ± 0.024	18.538 ± 0.026	18.019 ± 0.024	0.12	2.838
364.....	SM210	PL64		01 33 52.650	30 48 10.26	20.357 ± 0.025	20.633 ± 0.032	20.288 ± 0.034	20.051 ± 0.036	19.682 ± 0.039	0.10	1.548
365.....	SM212	PL166	SR130	01 33 53.424	30 33 02.98	19.574 ± 0.026	19.776 ± 0.030	19.267 ± 0.030	18.756 ± 0.029	18.221 ± 0.025	0.14	2.580
366.....	SM214	PL65		01 33 53.664	30 48 21.60	17.556 ± 0.006	17.889 ± 0.008	17.549 ± 0.008	17.337 ± 0.009	16.997 ± 0.009	0.10	3.096
367.....	SM215	PL167		01 33 54.113	30 33 09.88	16.544 ± 0.009	17.464 ± 0.010	17.259 ± 0.009	17.089 ± 0.013	17.268 ± 0.011	0.10	1.548
368.....	SM216			01 33 54.381	30 21 52.00	.....	19.095 ± 0.018	18.577 ± 0.018	18.236 ± 0.018	15.343 ± 0.002	0.10	3.612
369.....	SM217	PL168	SR133	01 33 54.629	30 34 48.42	19.103 ± 0.023	19.364 ± 0.032	18.886 ± 0.041	18.612 ± 0.060	18.305 ± 0.065	0.12	3.354
370.....	SM218	PL66		01 33 54.704	30 48 43.80	19.411 ± 0.023	19.608 ± 0.031	19.235 ± 0.040	19.090 ± 0.058	18.062 ± 0.039	0.10	2.064
371.....	SM219	PL169		01 33 54.742	30 45 28.47	18.357 ± 0.019	18.403 ± 0.018	17.988 ± 0.018	17.686 ± 0.015	17.341 ± 0.018	0.10	2.580
372.....	SM220	PL170	SR134	01 33 54.785	30 32 15.90	17.934 ± 0.015	18.163 ± 0.014	17.886 ± 0.014	17.756 ± 0.014	17.578 ± 0.018	0.08	2.580
373.....	SM221	PL171	SR135	01 33 55.041	30 32 14.68	18.871 ± 0.030	18.941 ± 0.024	18.589 ± 0.026	18.442 ± 0.031	18.254 ± 0.040	0.12	2.580
374.....	SM222	PL67		01 33 55.154	30 47 58.11	16.776 ± 0.005	16.981 ± 0.006	16.623 ± 0.006	16.415 ± 0.006	16.070 ± 0.006	0.10	3.354
375.....	SM228	PL68		01 33 56.168	30 38 39.86	17.928 ± 0.011	18.473 ± 0.016	18.173 ± 0.017	17.898 ± 0.019	17.336 ± 0.018	0.20	2.064
376.....	SM229	PL172		01 33 56.200	30 45 51.79	19.210 ± 0.030	19.419 ± 0.032	19.053 ± 0.034	18.977 ± 0.047	18.606 ± 0.051	0.10	2.838
377.....	SM231	PL69	SR137	01 33 56.452	30 36 10.74	19.427 ± 0.015	19.490 ± 0.020	18.971 ± 0.019	18.670 ± 0.021	18.237 ± 0.024	0.12	1.548
378.....	SM232	PL173		01 33 56.921	30 41 38.46	19.908 ± 0.037	19.756 ± 0.034	19.153 ± 0.035	18.636 ± 0.039	18.011 ± 0.038	0.10	2.838
379.....	SM233	PL70		01 33 56.914	30 49 26.73	18.963 ± 0.016	19.152 ± 0.021	18.579 ± 0.019	18.187 ± 0.020	17.647 ± 0.016	0.10	3.096
380.....	SM234			01 33 57.129	30 50 31.65	19.550 ± 0.026	19.532 ± 0.029	18.666 ± 0.022	18.209 ± 0.019	17.612 ± 0.017	0.10	3.096
381.....	SM235	PL71		01 33 57.075	30 48 03.62	19.958 ± 0.035	19.738 ± 0.028	19.079 ± 0.022	18.566 ± 0.022	17.970 ± 0.018	0.10	2.838
382.....	SM236	PL72		01 33 57.136	30 40 20.68	19.667 ± 0.037	19.696 ± 0.038	19.245 ± 0.039	18.962 ± 0.042	18.699 ± 0.059	0.10	2.580
383.....	SM237	PL73		01 33 57.265	30 39 15.36	18.440 ± 0.012	18.583 ± 0.014	18.223 ± 0.019	17.908 ± 0.026	17.584 ± 0.036	0.10	2.064
384.....	SM238	PL174		01 33 57.341	30 41 28.45	19.724 ± 0.016	19.634 ± 0.017	19.097 ± 0.017	18.793 ± 0.021	18.350 ± 0.023	0.10	1.806
385.....	SM239			01 33 57.357	30 52 17.95	18.122 ± 0.008	18.208 ± 0.011	17.904 ± 0.012	17.773 ± 0.015	17.585 ± 0.018	0.10	3.354
386.....	SM240	PL175		01 33 57.652	30 41 32.58	19.751 ± 0.019	19.794 ± 0.022	19.356 ± 0.023	18.959 ± 0.022	18.337 ± 0.019	0.10	1.806
387.....	SM241	PL76	SR140	01 33 57.830	30 35 31.89	18.916 ± 0.037	18.945 ± 0.029	18.133 ± 0.020	17.699 ± 0.021	17.172 ± 0.019	0.11	2.838
388.....	SM242	PL74		01 33 57.829	30 49 04.82	18.059 ± 0.009	19.351 ± 0.020	19.185 ± 0.023	18.429 ± 0.019	19.082 ± 0.052	0.10	2.322
389.....	SM243	PL176	SR139	01 33 57.871	30 33 25.86	16.525 ± 0.004	17.202 ± 0.006	17.078 ± 0.006	16.971 ± 0.007	16.718 ± 0.008	0.12	2.580
390.....	SM245	PL177		01 33 58.010	30 45 45.26	17.237 ± 0.007	17.497 ± 0.009	17.173 ± 0.009	16.945 ± 0.010	16.640 ± 0.011	0.15	3.096
391.....	SM246	PL77		01 33 58.012	30 39 26.25	16.925 ± 0.006	17.607 ± 0.010	17.459 ± 0.013	17.392 ± 0.019	17.267 ± 0.030	0.10	3.096
392.....	SM247	PL78		01 33 58.050	30 38 15.57	17.698 ± 0.007	18.275 ± 0.010	18.121 ± 0.016	18.037 ± 0.022	17.723 ± 0.026	0.20	2.322
393.....	SM248	PL79		01 33 58.387	30 39 15.05	18.429 ± 0.019	18.617 ± 0.020	18.223 ± 0.027	18.034 ± 0.041	17.428 ± 0.039	0.15	3.096
394.....	SM249	PL80		01 33 58.557	30 48 42.74	17.968 ± 0.014	18.976 ± 0.018	18.887 ± 0.021	18.375 ± 0.023	18.613 ± 0.038	0.20	2.064
395.....	SM250	PL178		01 33 58.859	30 34 43.34	19.204 ± 0.038	19.580 ± 0.036	19.349 ± 0.038	19.368 ± 0.051	19.556 ± 0.094	0.10	1.548
396.....	SM251	PL81		01 33 58.875	30 49 11.12	17.537 ± 0.007	18.516 ± 0.013	18.273 ± 0.014	17.704 ± 0.012	17.839 ± 0.019	0.15	2.580
397.....	SM252	PL82		01 33 59.054	30 50 05.97	19.250 ± 0.018	19.257 ± 0.026	18.744 ± 0.023	18.437 ± 0.024	18.055 ± 0.025	0.15	2.322
398.....	SM253	PL83		01 33 59.434	30 48 26.83	20.722 ± 0.045	21.110 ± 0.066	20.795 ± 0.071	20.679 ± 0.088	20.350 ± 0.109	0.15	1.806
399.....	SM254	PL179		01 33 59.494	30 47 29.69	20.290 ± 0.026	20.447 ± 0.032	19.981 ± 0.028	19.557 ± 0.025	19.143 ± 0.029	0.20	1.806
400.....	SM255	PL180		01 33 59.523	30 45 49.92	16.311 ± 0.005	16.863 ± 0.007	16.709 ± 0.008	16.618 ± 0.010	16.299 ± 0.011	0.15	3.612
401.....	SM256	PL181		01 33 59.640	30 47 38.36	20.408 ± 0.026	20.660 ± 0.035	20.178 ± 0.033	20.017 ± 0.040	19.718 ± 0.042	0.15	1.806
402.....	SM257	PL182		01 33 59.734	30 41 24.35	16.763 ± 0.003	17.551 ± 0.007	17.362 ± 0.007	17.338 ± 0.010	17.379 ± 0.016	0.10	2.580
403.....	SM258	PL84		01 33 59.815	30 39 45.41	19.355 ± 0.070	19.807 ± 0.087	19.081 ± 0.073	18.564 ± 0.066	17.961 ± 0.064	0.15	2.580

TABLE 3
(CONTINUED.)

ID	ID	ID	ID	R.A. (J2000.0)	Decl. (J2000.0)	U (mag)	B (mag)	V (mag)	R_C (mag)	I_C (mag)	$E(B - V)$ (mag)	r_{ap} ($''$)
404.....	SM260	PL183	SR146	01 34 00.005	30 33 54.44	15.451 \pm 0.003	16.230 \pm 0.004	16.109 \pm 0.004	15.920 \pm 0.004	15.471 \pm 0.004	0.08	3.096
405.....	SM261	PL85		01 34 00.188	30 37 47.39	16.553 \pm 0.004	16.612 \pm 0.004	15.953 \pm 0.003	15.650 \pm 0.003	15.356 \pm 0.003	0.10	2.580
406.....	SM262	PL86		01 34 00.246	30 48 36.68	19.569 \pm 0.024	19.587 \pm 0.025	19.179 \pm 0.025	18.818 \pm 0.025	18.474 \pm 0.027	0.10	2.322
407.....	SM264	PL184		01 34 00.465	30 41 23.03	19.214 \pm 0.027	19.131 \pm 0.023	18.534 \pm 0.021	18.040 \pm 0.020	17.505 \pm 0.022	0.15	2.580
408.....	SM265	PL185		01 34 00.728	30 50 09.24	18.925 \pm 0.022	19.072 \pm 0.024	18.619 \pm 0.025	18.228 \pm 0.025	17.720 \pm 0.024	0.15	3.096
409.....	SM266	PL186		01 34 01.032	30 46 58.74	20.705 \pm 0.056	20.629 \pm 0.052	19.959 \pm 0.042	19.681 \pm 0.049	19.240 \pm 0.049	0.15	2.322
410.....	SM267	PL187		01 34 01.286	30 39 23.50	18.397 \pm 0.018	18.638 \pm 0.021	18.241 \pm 0.022	18.136 \pm 0.037	17.823 \pm 0.047	0.15	2.580
411.....	SM270	PL87		01 34 01.658	30 49 44.09	18.347 \pm 0.014	18.412 \pm 0.014	17.930 \pm 0.013	17.635 \pm 0.014	17.276 \pm 0.014	0.10	3.354
412.....	SM271	PL188	SR147	01 34 01.750	30 32 25.81	18.976 \pm 0.018	19.031 \pm 0.021	18.528 \pm 0.020	18.159 \pm 0.020	17.686 \pm 0.020	0.09	3.354
413.....	SM272	PL88		01 34 01.965	30 38 11.13	18.574 \pm 0.025	18.819 \pm 0.027	18.512 \pm 0.030	18.417 \pm 0.041	18.083 \pm 0.053	0.20	3.354
414.....	SM273	PL189		01 34 01.982	30 39 37.92	17.346 \pm 0.007	17.198 \pm 0.006	16.399 \pm 0.005	15.922 \pm 0.005	15.414 \pm 0.006	0.15	3.354
415.....	SM274	PL190		01 34 02.312	30 50 27.81	18.202 \pm 0.009	19.119 \pm 0.018	18.956 \pm 0.020	18.525 \pm 0.019	18.377 \pm 0.024	0.15	2.838
416.....	SM275	PL191		01 34 02.464	30 40 40.68	17.815 \pm 0.008	17.521 \pm 0.008	16.545 \pm 0.006	15.930 \pm 0.005	15.313 \pm 0.005	0.10	3.354
417.....	SM279	PL89		01 34 02.747	30 48 36.57	20.562 \pm 0.048	19.825 \pm 0.027	18.011 \pm 0.009	16.889 \pm 0.005	15.809 \pm 0.003	0.15	2.580
418.....	SM281			01 34 02.891	30 43 20.80	17.163 \pm 0.005	17.126 \pm 0.005	16.391 \pm 0.004	15.936 \pm 0.004	15.476 \pm 0.004	0.10	3.096
419.....	SM282	PL192		01 34 03.092	30 45 35.56	18.759 \pm 0.018	18.962 \pm 0.021	18.454 \pm 0.023	17.997 \pm 0.025	17.445 \pm 0.027	0.15	3.870
420.....	SM284			01 34 03.102	30 52 13.96	17.037 \pm 0.005	17.171 \pm 0.006	16.819 \pm 0.006	16.655 \pm 0.006	16.392 \pm 0.006	0.10	3.612
421.....	SM285	PL90		01 34 03.098	30 48 11.15	19.554 \pm 0.040	19.786 \pm 0.045	19.472 \pm 0.050	19.375 \pm 0.068	18.515 \pm 0.048	0.20	2.580
422.....	SM287			01 34 03.311	30 48 26.73	18.787 \pm 0.014	19.538 \pm 0.027	19.319 \pm 0.029	19.312 \pm 0.041	19.047 \pm 0.057	0.10	2.580
423.....	SM289	PL193		01 34 03.881	30 47 29.19	17.954 \pm 0.009	18.039 \pm 0.011	17.556 \pm 0.012	17.248 \pm 0.012	16.791 \pm 0.012	0.10	3.612
424.....	SM290	PL91		01 34 04.301	30 39 22.87	17.579 \pm 0.008	18.305 \pm 0.014	18.088 \pm 0.016	17.897 \pm 0.020	17.500 \pm 0.021	0.10	2.322
425.....	SM291	PL92		01 34 04.457	30 36 56.22	17.591 \pm 0.010	18.053 \pm 0.012	17.755 \pm 0.014	17.463 \pm 0.015	16.911 \pm 0.014	0.10	3.612
426.....	SM292	PL194		01 34 04.737	30 49 18.08	18.654 \pm 0.013	19.059 \pm 0.017	18.745 \pm 0.018	18.423 \pm 0.017	17.979 \pm 0.016	0.15	2.580
427.....	SM294	PL196		01 34 05.065	30 49 42.70	20.679 \pm 0.073	20.658 \pm 0.067	19.685 \pm 0.040	19.041 \pm 0.029	18.448 \pm 0.027	0.15	2.580
428.....	SM296			01 34 05.223	30 57 01.30	19.458 \pm 0.024	19.485 \pm 0.033	18.797 \pm 0.022	18.372 \pm 0.019	17.773 \pm 0.015	0.10	4.128
429.....	SM298	PL198		01 34 05.824	30 49 56.88	17.582 \pm 0.006	17.952 \pm 0.008	17.728 \pm 0.008	17.646 \pm 0.009	17.412 \pm 0.009	0.15	2.580
430.....	SM300	PL93		01 34 06.302	30 37 26.16	18.696 \pm 0.024	18.738 \pm 0.023	17.960 \pm 0.017	17.532 \pm 0.019	17.090 \pm 0.022	0.10	3.096
431.....	SM301	PL94		01 34 06.387	30 37 30.45	18.934 \pm 0.032	18.797 \pm 0.030	18.238 \pm 0.029	17.678 \pm 0.024	17.025 \pm 0.019	0.10	3.354
432.....	SM302	PL199		01 34 06.566	30 50 18.28	18.823 \pm 0.011	19.281 \pm 0.019	19.021 \pm 0.022	18.881 \pm 0.027	18.712 \pm 0.039	0.10	2.322
433.....	SM303	PL95		01 34 06.654	30 48 56.13	16.506 \pm 0.005	17.563 \pm 0.009	17.224 \pm 0.011	16.807 \pm 0.011	17.161 \pm 0.020	0.10	4.902
434.....	SM304	PL200		01 34 06.759	30 48 32.81	18.884 \pm 0.017	19.121 \pm 0.021	18.796 \pm 0.022	18.638 \pm 0.027	18.327 \pm 0.034	0.20	3.096
435.....	SM305	PL201		01 34 06.780	30 47 27.12	16.199 \pm 0.016	17.079 \pm 0.014	17.049 \pm 0.017	17.149 \pm 0.029	17.129 \pm 0.015	0.20	1.548
436.....	SM306		SR154	01 34 06.973	30 32 00.22	18.946 \pm 0.013	18.845 \pm 0.013	18.317 \pm 0.014	17.959 \pm 0.014	17.502 \pm 0.014	0.08	3.612
437.....	SM307	PL202		01 34 07.008	30 50 57.49	19.410 \pm 0.021	19.467 \pm 0.025	19.161 \pm 0.030	19.146 \pm 0.040	18.737 \pm 0.042	0.15	2.838
438.....	SM308	PL203		01 34 07.006	30 49 24.43	17.669 \pm 0.007	18.068 \pm 0.009	17.829 \pm 0.010	17.688 \pm 0.012	17.292 \pm 0.012	0.20	3.612
439.....	SM310	PL96		01 34 07.253	30 38 29.58	19.074 \pm 0.021	19.304 \pm 0.023	18.790 \pm 0.027	18.367 \pm 0.029	17.887 \pm 0.034	0.10	2.580
440.....	SM311	PL204		01 34 07.348	30 47 41.68	20.539 \pm 0.084	20.472 \pm 0.073	19.617 \pm 0.050	19.150 \pm 0.045	18.660 \pm 0.036	0.20	2.580
441.....	SM312	PL205		01 34 07.489	30 50 11.05	18.566 \pm 0.013	18.957 \pm 0.020	18.811 \pm 0.026	18.599 \pm 0.029	18.278 \pm 0.035	0.10	3.096
442.....	SM316	PL206		01 34 08.018	30 38 38.29	17.512 \pm 0.007	17.286 \pm 0.006	16.376 \pm 0.004	15.839 \pm 0.004	15.282 \pm 0.004	0.10	3.354
443.....	SM320	PL97		01 34 08.500	30 39 02.40	15.853 \pm 0.002	16.482 \pm 0.004	16.342 \pm 0.004	16.270 \pm 0.005	16.022 \pm 0.006	0.10	2.580
444.....	SM321	PL98		01 34 08.609	30 39 22.80	17.585 \pm 0.010	17.803 \pm 0.011	17.373 \pm 0.012	17.125 \pm 0.016	16.816 \pm 0.020	0.10	3.096
445.....	SM322	PL99		01 34 08.733	30 42 55.24	19.355 \pm 0.022	19.232 \pm 0.021	18.813 \pm 0.027	18.523 \pm 0.033	18.252 \pm 0.050	0.10	3.354
446.....	SM323	PL207		01 34 08.762	30 48 16.27	19.271 \pm 0.027	19.323 \pm 0.030	18.972 \pm 0.037	18.711 \pm 0.041	18.219 \pm 0.045	0.15	3.354
447.....	SM327	PL208		01 34 09.702	30 21 29.96	18.766 \pm 0.010	18.890 \pm 0.010	18.618 \pm 0.010	18.451 \pm 0.011	18.116 \pm 0.011	0.05	2.838
448.....	SM328			01 34 09.769	30 52 06.13	19.210 \pm 0.018	19.556 \pm 0.026	19.374 \pm 0.029	19.137 \pm 0.030	18.829 \pm 0.029	0.10	2.580
449.....	SM329			01 34 10.099	30 45 29.44	17.807 \pm 0.010	17.896 \pm 0.012	17.476 \pm 0.012	17.336 \pm 0.016	16.943 \pm 0.016	0.10	4.386
450.....	SM333			01 34 10.935	30 40 30.03	18.339 \pm 0.012	18.259 \pm 0.013	17.730 \pm 0.013	17.377 \pm 0.014	16.896 \pm 0.016	0.10	3.354
451.....	SM335			01 34 11.355	30 41 27.95	18.379 \pm 0.015	18.369 \pm 0.015	17.880 \pm 0.015	17.640 \pm 0.018	17.295 \pm 0.021	0.10	4.128
452.....	SM338	PL100		01 34 11.795	30 42 20.05	19.987 \pm 0.019	20.087 \pm 0.024	19.689 \pm 0.022	19.453 \pm 0.025	19.295 \pm 0.039	0.25	1.290
453.....	SM342	PL101		01 34 13.687	30 43 18.44	18.954 \pm 0.013	19.327 \pm 0.018	19.058 \pm 0.021	19.088 \pm 0.031	19.181 \pm 0.054	0.15	2.580
454.....	SM345			01 34 13.841	30 19 47.31	18.767 \pm 0.008	18.754 \pm 0.009	18.385 \pm 0.009	18.126 \pm 0.009	17.555 \pm 0.008	0.10	3.354
455.....	SM346		SR159	01 34 13.979	30 27 58.99	18.443 \pm 0.011	18.870 \pm 0.014	18.135 \pm 0.011	17.386 \pm 0.008	16.427 \pm 0.005	0.05	3.870
456.....	SM347	PL209		01 34 13.996	30 39 29.47	18.829 \pm 0.015	18.795 \pm 0.016	18.367 \pm 0.016	18.169 \pm 0.019	17.751 \pm 0.021	0.15	2.838
457.....	SM350	PL210		01 34 14.236	30 39 58.48	18.546 \pm 0.013	18.477 \pm 0.015	17.911 \pm 0.015	17.666 \pm 0.016	17.245 \pm 0.018	0.10	3.354
458.....	SM351	PL102		01 34 14.647	30 32 35.19	18.653 \pm 0.010	18.589 \pm 0.010	18.153 \pm 0.011	17.912 \pm 0.010	17.582 \pm 0.012	0.20	3.096
459.....	SM353	PL103		01 34 15.037	30 41 19.14	17.638 \pm 0.007	17.835 \pm 0.009	17.431 \pm 0.010	17.227 \pm 0.012	16.921 \pm 0.014	0.10	4.128

TABLE 3
(CONTINUED.)

ID	ID	ID	ID	R.A. (J2000.0)	Decl. (J2000.0)	U (mag)	B (mag)	V (mag)	R_C (mag)	I_C (mag)	$E(B - V)$ (mag)	r_{ap} ($''$)
460.....	SM355	PL104		01 34 15.510	30 42 11.35	18.020 ± 0.011	18.224 ± 0.013	17.785 ± 0.013	17.447 ± 0.014	16.933 ± 0.012	0.10	3.612
461.....	SM358			01 34 16.370	30 47 43.10	18.840 ± 0.014	18.758 ± 0.015	18.208 ± 0.015	17.919 ± 0.016	17.538 ± 0.017	0.10	3.096
462.....	SM359	PL211		01 34 16.358	30 37 49.12	17.678 ± 0.015	18.024 ± 0.014	17.637 ± 0.012	17.433 ± 0.012	17.115 ± 0.011	0.10	2.838
463.....	SM360	PL212		01 34 16.546	30 40 28.92	19.858 ± 0.029	19.676 ± 0.025	19.191 ± 0.026	18.880 ± 0.030	18.516 ± 0.037	0.10	2.838
464.....	SM361	PL213		01 34 17.549	30 42 36.57	20.099 ± 0.024	20.235 ± 0.033	19.857 ± 0.036	19.474 ± 0.038	18.787 ± 0.032	0.10	2.580
465.....	SM367	PL214		01 34 18.575	30 44 47.83	21.749 ± 0.119	21.044 ± 0.066	19.459 ± 0.021	18.620 ± 0.015	17.869 ± 0.012	0.10	1.548
466.....	SM371	PL215		01 34 19.882	30 36 12.84	17.037 ± 0.004	17.387 ± 0.006	17.123 ± 0.006	16.978 ± 0.007	16.765 ± 0.007	0.15	3.096
467.....	SM372	PL216		01 34 20.146	30 39 33.21	18.839 ± 0.012	18.832 ± 0.013	18.407 ± 0.016	18.183 ± 0.018	17.865 ± 0.017	0.10	2.838
468.....	SM375	PL217		01 34 21.403	30 39 40.13	20.193 ± 0.034	20.161 ± 0.034	19.518 ± 0.035	19.151 ± 0.035	18.591 ± 0.037	0.10	2.580
469.....	SM376	PL218		01 34 21.573	30 36 45.73	18.803 ± 0.013	19.019 ± 0.016	18.594 ± 0.018	18.395 ± 0.021	18.126 ± 0.029	0.10	2.580
470.....	SM377	PL219		01 34 21.997	30 44 39.21	18.783 ± 0.015	19.026 ± 0.019	18.626 ± 0.019	18.553 ± 0.025	18.249 ± 0.030	0.10	2.580
471.....	SM382	PL220		01 34 23.035	30 37 39.88	19.351 ± 0.018	19.496 ± 0.022	19.065 ± 0.024	18.738 ± 0.028	18.389 ± 0.030	0.15	3.096
472.....	SM383	PL221		01 34 23.130	30 43 46.43	19.956 ± 0.026	20.004 ± 0.030	19.553 ± 0.030	19.088 ± 0.027	18.519 ± 0.024	0.10	2.580
473.....	SM384			01 34 23.517	30 25 58.26	18.197 ± 0.007	18.226 ± 0.008	17.842 ± 0.007	17.630 ± 0.007	17.346 ± 0.007	0.10	3.096
474.....	SM385			01 34 24.533	30 53 05.51	19.261 ± 0.018	19.014 ± 0.017	18.199 ± 0.013	17.668 ± 0.009	17.119 ± 0.008	0.10	3.354
475.....	SM387			01 34 25.373	30 41 28.38	18.324 ± 0.010	18.181 ± 0.010	17.507 ± 0.008	17.095 ± 0.008	16.660 ± 0.008	0.10	3.354
476.....	SM388	PL222		01 34 25.485	30 36 56.84	18.438 ± 0.011	18.581 ± 0.013	18.188 ± 0.014	17.895 ± 0.015	17.342 ± 0.013	0.10	3.096
477.....	SM389	PL223		01 34 26.302	30 37 23.39	18.182 ± 0.009	18.554 ± 0.011	18.181 ± 0.011	17.819 ± 0.011	17.382 ± 0.010	0.10	3.096
478.....	SM392	PL224		01 34 27.124	30 36 42.41	18.136 ± 0.010	18.181 ± 0.010	17.697 ± 0.010	17.423 ± 0.009	17.084 ± 0.009	0.10	3.096
479.....	SM393			01 34 27.608	30 55 53.37	20.119 ± 0.030	20.130 ± 0.035	19.653 ± 0.032	19.565 ± 0.038	19.197 ± 0.039	0.10	2.838
480.....	SM395	PL225		01 34 28.177	30 36 17.13	15.911 ± 0.003	16.211 ± 0.004	15.938 ± 0.003	15.778 ± 0.003	15.540 ± 0.003	0.10	2.838
481.....	SM396	PL226		01 34 28.475	30 37 56.12	19.049 ± 0.013	19.210 ± 0.015	18.900 ± 0.017	18.748 ± 0.021	18.469 ± 0.023	0.15	2.580
482.....	SM399	PL227		01 34 29.043	30 38 05.24	19.051 ± 0.016	19.428 ± 0.021	18.999 ± 0.022	18.618 ± 0.021	18.251 ± 0.022	0.10	3.096
483.....	SM400			01 34 29.143	30 53 20.59	19.095 ± 0.014	18.963 ± 0.015	18.382 ± 0.014	18.084 ± 0.013	17.659 ± 0.012	0.10	3.096
484.....	SM401			01 34 29.292	30 56 06.10	19.206 ± 0.016	18.938 ± 0.016	18.266 ± 0.013	17.818 ± 0.013	17.198 ± 0.010	0.10	3.354
485.....	SM402	PL228		01 34 30.226	30 38 12.97	17.848 ± 0.007	17.880 ± 0.008	17.127 ± 0.007	16.618 ± 0.005	16.108 ± 0.005	0.10	3.870
486.....	SM405	PL229		01 34 31.047	30 37 41.05	19.554 ± 0.023	20.009 ± 0.029	19.904 ± 0.034	19.964 ± 0.048	19.875 ± 0.066	0.10	2.580
487.....	SM406	PL230		01 34 31.721	30 39 14.71	20.434 ± 0.027	20.669 ± 0.034	20.261 ± 0.036	19.850 ± 0.036	19.425 ± 0.034	0.10	1.806
488.....	SM409	PL231		01 34 32.884	30 38 11.96	19.803 ± 0.026	19.679 ± 0.025	19.030 ± 0.023	18.489 ± 0.020	17.848 ± 0.018	0.10	3.354
489.....	SM410	PL232		01 34 33.073	30 37 36.26	18.106 ± 0.009	18.473 ± 0.011	18.291 ± 0.013	18.116 ± 0.014	17.861 ± 0.015	0.10	3.096
490.....	SM411	PL233		01 34 33.099	30 38 14.19	19.738 ± 0.026	19.629 ± 0.024	18.983 ± 0.020	18.637 ± 0.021	18.317 ± 0.025	0.10	3.354
491.....	SM412	PL234		01 34 33.169	30 38 26.66	20.160 ± 0.029	20.226 ± 0.031	19.604 ± 0.031	19.095 ± 0.027	18.610 ± 0.025	0.10	2.838
492.....	SM413	PL235		01 34 33.714	30 39 15.67	18.364 ± 0.011	18.663 ± 0.013	18.276 ± 0.013	17.986 ± 0.015	17.428 ± 0.013	0.10	3.354
493.....	SM416	PL236		01 34 35.310	30 38 29.98	19.976 ± 0.026	19.708 ± 0.021	18.794 ± 0.015	18.274 ± 0.012	17.849 ± 0.013	0.10	3.354
494.....	SM419	PL237		01 34 38.967	30 38 51.88	18.272 ± 0.006	18.951 ± 0.010	18.582 ± 0.009	18.340 ± 0.009	17.979 ± 0.009	0.10	2.322
495.....	SM420	PL238		01 34 40.411	30 46 01.36	15.336 ± 0.004	16.076 ± 0.005	15.885 ± 0.004	15.626 ± 0.004	14.806 ± 0.002	0.20	3.612
496.....	SM421			01 34 40.660	30 49 47.28	17.835 ± 0.008	18.077 ± 0.011	17.800 ± 0.011	17.625 ± 0.012	17.433 ± 0.014	0.10	3.612
497.....	SM422	PL239		01 34 40.721	30 53 01.87	19.938 ± 0.026	19.932 ± 0.030	19.416 ± 0.029	18.915 ± 0.023	17.946 ± 0.014	0.05	3.096
498.....	SM425			01 34 42.791	30 49 19.18	19.814 ± 0.043	19.777 ± 0.035	18.950 ± 0.027	18.413 ± 0.019	17.856 ± 0.018	0.10	3.354
499.....	SM426	PL240		01 34 43.194	30 52 19.20	22.137 ± 0.104	21.896 ± 0.102	20.735 ± 0.050	20.246 ± 0.043	19.623 ± 0.033	0.15	2.064
500.....	SM427			01 34 43.735	30 47 38.08	17.777 ± 0.007	17.748 ± 0.007	17.247 ± 0.006	16.968 ± 0.006	16.583 ± 0.005	0.10	3.096
501.....	SM428	PL241		01 34 44.202	30 52 18.98	18.565 ± 0.011	18.427 ± 0.012	17.578 ± 0.009	17.073 ± 0.007	16.595 ± 0.006	0.15	3.870
502.....	SM429			01 34 45.095	30 50 33.41	20.163 ± 0.026	19.917 ± 0.028	19.050 ± 0.018	18.507 ± 0.016	18.055 ± 0.013	0.10	3.096
503.....	SM432	PL242		01 34 45.911	30 53 04.36	20.437 ± 0.031	20.518 ± 0.040	19.939 ± 0.035	19.567 ± 0.029	19.383 ± 0.030	0.05	2.580
504.....	SM436			01 34 46.780	30 49 16.04	19.279 ± 0.015	19.316 ± 0.019	18.911 ± 0.018	18.760 ± 0.021	18.483 ± 0.022	0.10	2.838
505.....	SM438			01 34 49.621	30 21 55.50	16.820 ± 0.004	16.813 ± 0.004	16.120 ± 0.004	15.707 ± 0.003	15.317 ± 0.003	0.10	3.870
506.....	SM439			01 34 50.138	30 47 04.26	16.581 ± 0.003	16.811 ± 0.004	16.501 ± 0.004	16.311 ± 0.004	16.037 ± 0.004	0.10	3.612
507.....	SM441			01 34 52.224	30 50 05.53	19.384 ± 0.024	19.293 ± 0.025	19.001 ± 0.026	18.771 ± 0.026	18.598 ± 0.028	0.10	4.128
508.....	SM443			01 34 53.179	30 51 47.86	20.297 ± 0.031	20.298 ± 0.037	19.783 ± 0.033	19.562 ± 0.033	19.312 ± 0.033	0.10	3.096
509.....	SM446			01 35 01.556	30 51 26.91	19.938 ± 0.027	19.939 ± 0.032	19.397 ± 0.027	19.011 ± 0.024	18.500 ± 0.020	0.10	3.612
510.....	SM447			01 35 04.710	30 46 10.68	19.023 ± 0.012	19.120 ± 0.015	18.605 ± 0.013	18.253 ± 0.017	17.213 ± 0.031	0.10	3.354
511.....	SM449			01 35 18.248	30 49 53.92	19.160 ± 0.014	18.962 ± 0.015	18.255 ± 0.014	17.777 ± 0.011	17.286 ± 0.010	0.10	5.160